

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

January 19, 2024

The Annual Meeting of Stockholders of Northern Technologies International Corporation, a Delaware corporation, will be held at our corporate executive offices located at 4201 Woodland Road, Circle Pines, Minnesota 55014, beginning at 8:00 a.m., Central Standard Time, on Friday, January 19, 2024, for the following purposes:

- 1. To elect eight persons to serve as directors until our next annual meeting of stockholders or until their respective successors are elected and qualified.
- 2. To approve, on an advisory basis, the compensation of our named executive officers, as disclosed in the accompanying proxy statement.
- 3. To ratify the appointment of Baker Tilly US, LLP as our independent registered public accounting firm for the fiscal year ending August 31, 2024.
- 4. To approve the Northern Technologies International Corporation 2024 Stock Incentive Plan.
- 5. To transact such other business as may properly come before the meeting or any adjournment of the meeting.

Only those stockholders of record at the close of business on November 21, 2023 will be entitled to notice of, and to vote at, the meeting and any adjournments thereof. A stockholder list will be available at our corporate offices beginning January 9, 2024 during normal business hours for examination by any stockholder registered on NTIC's stock ledger as of the record date, November 21, 2023, for any purpose germane to the Annual Meeting.

By Order of the Board of Directors,

Matthew C. Wolsfeld *Corporate Secretary*

December 4, 2023 Circle Pines, Minnesota

Important: Whether or not you expect to attend the meeting in person, please vote by the Internet or telephone, or request a paper proxy card to sign, date and return by mail so that your shares may be voted. A prompt response is helpful and your cooperation is appreciated.

[Page intentionally left blank]

TABLE OF CONTENTS

Page

PROXY STATEMENT SUMMARY	4
GENERAL INFORMATION ABOUT THE ANNUAL MEETING AND VOTING	
Date, Time, Place and Purposes of Meeting	
Who Can Vote	
How You Can Vote	
How Does the Board Recommend that You Vote	-
How You May Change Your Vote or Revoke Your Proxy	
Quorum Requirement	
Vote Required.	
Other Business	
Procedures at the Annual Meeting	
Householding of Annual Meeting Materials	
Proxy Solicitation Costs	
PROPOSAL ONE-ELECTION OF DIRECTORS	
Number of Directors	
Nominees for Director	
Information about Current Directors and Board Nominees	
Additional Information about Current Directors and Board Nominees	
Board Recommendation	
PROPOSAL TWO—ADVISORY VOTE ON EXECUTIVE COMPENSATION	
Introduction	
Board Recommendation	
PROPOSAL THREE—RATIFICATION OF APPOINTMENT OF INDEPENDENT	
REGISTERED PUBLIC ACCOUNTING FIRM	. 28
Appointment of Independent Registered Public Accounting Firm	
Audit, Audit-Related, Tax and Other Fees	. 28
Audit Committee Pre-Approval Policies and Procedures	
Board Recommendation	. 29
PROPOSAL FOUR—APPROVAL OF NORTHERN TECHNOLOGIES INTERNATIONAL	
CORPORATION 2024 STOCK INCENTIVE PLAN	. 30
Background	
Reasons Why You Should Vote in Favor of the 2024 Plan	
Summary of Sound Governance Features of the 2024 Plan	
Background for Shares Authorized for Issuance	
Summary of the 2024 Plan Features	
U.S. Federal Income Tax Consequences	
New Plan Benefits	
Board Recommendation	
STOCK OWNERSHIP	. 46
Beneficial Ownership of Significant Stockholders and Management	. 46
Stock Ownership Guidelines	
Securities Authorized for Issuance Under Equity Compensation Plans	
CORPORATE GOVERNANCE	
Governance Best Practices	
Corporate Governance Guidelines	
Board Leadership Structure	
Director Independence	. 52

Board Meetings and Attendance	
Board Committees	
Audit Committee	
Compensation Committee	
Nominating and Corporate Governance Committee	
Director Nominations Process	
Board Diversity Matrix	
Board Oversight of Risk	59
Board Oversight of Strategy	
Board and Board Committee Evaluations	
Code of Ethics	
No Political Contributions	
Policy Regarding Director Attendance at Annual Meetings of Stockholders	
Complaint Procedures	61
Stockholder Engagement	61
Process Regarding Stockholder Communications with Board of Directors	
DIRECTOR COMPENSATION	
Summary of Cash and Other Compensation	
Non-Employee Director Compensation Program	
Consulting Agreement	
EXECUTIVE COMPENSATION	
Compensation Review	67
Summary of Cash and Other Compensation	77
Outstanding Equity Awards at Fiscal Year End	
Option Exercises for Fiscal 2023	
Stock Incentive Plans	
Post-Termination Severance and Change in Control Arrangements	
Pay Versus Performance Disclosure	
Compensation Committee Interlocks and Insider Participation	88
RELATED PERSON RELATIONSHIPS AND TRANSACTIONS	
Introduction	
Procedures Regarding Approval of Related Party Transactions	89
Description of Related Party Transactions	90
STOCKHOLDER PROPOSALS AND DIRECTOR NOMINATIONS FOR 2025 ANNUAL	
MEETING OF STOCKHOLDERS	
COPIES OF FISCAL 2023 ANNUAL REPORT	91

References in this proxy statement to:

- "NTIC," "we," "us," "our," or the "Company" refer to Northern Technologies International Corporation;
- "Board" refer to the Board of Directors of NTIC;
- "Annual Meeting" refer to our 2024 Annual Meeting of Stockholders; and
- "Fiscal 2023 Annual Report" or "Fiscal 2023 Annual Report to Stockholders" refer to our Annual Report to Stockholders for fiscal 2023, including our Annual Report on Form 10-K for the year ended August 31, 2023, being made available together with this proxy statement.

Information on our website and any other website referenced herein is not incorporated by reference into, and does not constitute a part of, this proxy statement.

TM and [®] denote trademarks and registered trademarks of Northern Technologies International Corporation or our affiliates, registered as indicated in the United States. All other trademarks and trade names referred to in this proxy statement are the property of their respective owners.

We intend to make this proxy statement and our Fiscal 2023 Annual Report available on the Internet and to commence mailing of the notice to all stockholders entitled to vote at the Annual Meeting beginning on or about December 4, 2023. We will mail paper copies of these materials, together with a proxy card, within three business days of a request properly made by a stockholder entitled to vote at the 2024 Annual Meeting of Stockholders.

PROXY STATEMENT SUMMARY

This executive summary provides an overview of the information included in this proxy statement. We recommend that you review the entire proxy statement and our Fiscal 2023 Annual Report to Stockholders before voting.

2024 ANNUAL MEETING OF STOCKHOLDERS

DATE AND TIME	Proposal	Board's Vote Recommendation	Page
Friday, January 19, 2024	Proposal No. 1: Election of directors	FOR	21
8:00 a.m. (Central Time)	Proposal No. 2: Advisory vote on executive compensation	FOR	26
4201 Woodland Road Circle Pines, MN 55014	Proposal No. 3: Ratification of appointment of independent registered public accounting firm	FOR	28
	Proposal No. 4: Approval of Northern Technologies International Corporation 2024 Stock Incentive Plan	FOR	30

RECORD DATE

November 21, 2023

Holders of record of our common stock at the close of business on November 21, 2023 are entitled to notice of, to attend, and to vote at the 2024 Annual Meeting of Stockholders or any continuation, postponement, or adjournment thereof.

On or about December 4, 2023, we expect to begin mailing a Notice of Internet Availability of Proxy Materials to stockholders of record as of November 21, 2023 and post our proxy materials on the website referenced in the Notice of Internet Availability of Proxy Materials (*www.proxyvote.com*).

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON JANUARY 19, 2024

This proxy statement and our Fiscal 2023 Annual Report to Stockholders are available on the Internet, free of charge, at *www.proxyvote.com*. On this website, you will be able to access this proxy statement, our Fiscal 2023 Annual Report to Stockholders, and any amendments or supplements to these materials that are required to be furnished to stockholders. We encourage you to access and review all of the important information contained in the proxy materials before voting.

FISCAL 2023 BUSINESS HIGHLIGHTS

Below are highlights of our financial, operational and strategic achievements during fiscal 2023.

Financial	
Net Sales	Our net sales increased 7.7% to a record \$79,902,952 during fiscal 2023 compared to fiscal 2022 primarily due to sales growth within our ZERUST [®] industrial and Natur-Tec product categories, as a result of higher global demand.
Quarterly Cash Dividends	We paid a quarterly cash dividend of \$0.07 per share during each quarter of fiscal 2023.
Operational	
15 Joint Ventures	Our 15 joint ventures provide us with access to global markets with an annual global market potential estimated at \$500 million.
10 Operating Subsidiaries	We maintain 10 wholly or majority-owned operating subsidiaries in North America, South America, Europe and Asia.
Over 60 Countries	Our network of joint ventures and subsidiaries allows us to operate in over 60 countries worldwide, allowing us reach customers globally.
Strategic	
Industrial Manufacturing Industry	ZERUST [®] rust and corrosion inhibiting packaging solutions resolve corrosion problems while reducing operating costs, increasing productivity and enhancing customer satisfaction. During fiscal 2023, ZERUST [®] industrial sales increased by 2.1% compared to fiscal 2022 as a result of increased demand.
Oil and Gas Industry	Our global network of trained corrosion management professionals and channel partners help us develop specialized corrosion mitigation solutions for the oil and gas industry, provide local support, and conduct client training. ZERUST [®] oil and gas net sales increased 69.2% during fiscal 2023 compared to fiscal 2022 primarily as a result of new opportunities with new customers.
Bioplastics Industry	Our Natur-Tec [®] biobased and compostable plastics are manufactured using NTIC's patented and/or proprietary technologies and are intended to replace conventional plastics and thereby reduce our customers' carbon footprint and provide environmentally sound waste disposal options. Sales of our Natur-Tec [®] products increased by 8.7% during fiscal 2023 compared to fiscal 2022 due to re-opening initiatives and government regulation related to disposable plastics.

CORPORATE GOVERNANCE HIGHLIGHTS

- ✓ Annual election of directors
- ✓ Majority of independent directors
- ✓ Independent Board Chairman
- ✓ Three fully independent Board committees
- ✓ Corporate governance guidelines
- ✓ Annual review of governance documents
- Stock ownership guidelines for executive officers and directors
- ✓ Recent Board refreshment efforts
- ✓ 100% Board meeting attendance by directors
- ✓ No poison pill
- ✓ Annual say-on-pay vote
- ✓ Robust clawback policy
- ✓ No guaranteed bonuses or significant perks
- ✓ Limits on board memberships held

STOCKHOLDER ENGAGEMENT

We are committed to a robust and proactive stockholder engagement program. The Board of Directors values the perspectives of our stockholders, and feedback from stockholders on our business, corporate governance, executive compensation, and sustainability practices are important considerations for Board discussions throughout the year. Some of the actions we have taken in response to feedback from proxy advisory firms and stockholders over the last several years are described below.

What We Heard	What We Did
Encourage Board refreshment	We added Cristina Pinho to our Board in January 2023.
Increase Board gender diversity	We added Nancy E. Calderon, Sarah E. Kemp and Cristina Pinho to the Board of Directors and updated our Nominating and Corporate Governance Committee Charter to include responsibility for making recommendations to the Board of Directors regarding director diversity.
Increase stockholder influence over director elections	We adopted a "plurality plus" vote standard for uncontested director elections, with a director resignation policy, instead of a simple plurality vote standard.
Align long-term incentives	We extended the vesting of our annual stock option grants to three-year vesting in response to a concern raised by one of our institutional stockholders.
Increase visibility of Environmental, Social and Governance ("ESG") principles	We adopted a Health, Safety and Environment Policy as well as a Human Rights Policy to formalize our approach and further our goals with respect to these matters, as described below. We have also added an ESG section to our investor relations website to increase visibility.
Ensure the recovery of incentive compensation based on incorrect calculations that resulted in a financial restatement or egregious behavior	We adopted a robust clawback policy which applies to not only financial restatements but also if an executive engages in egregious conduct that is substantially detrimental to NTIC.
Align the interests of executive officers and directors with those of stockholders	We adopted stock ownership guidelines applicable to our executive officers and directors to ensure that their interests would be closely aligned with those of our stockholders.

BOARD OF DIRECTORS COMPOSITION AND DIVERSITY

The Board of Directors understands the importance of adding diverse, experienced talent to the Board of Directors in order to establish an array of experience and strategic views. The Nominating and Corporate Governance Committee is committed to refreshment efforts to ensure that the composition of the Board of Directors and each of its committees encompasses a wide range of perspectives and knowledge.

All of our Board nominees collectively bring tremendous diversity to the Board. Each nominee is a strategic thinker and has varying, specialized experience in the areas relevant to NTIC and its businesses. Moreover, their collective experience covers a wide range of geographies and industries, and roles in academia, corporate governance and government. Our eight current directors range in age from 56 to 75; three of the eight directors are women; two are of Asian descent; one is of African descent; one is a citizen of Brazil, one is a citizen of the Republic of Korea and one is a citizen of Germany.







BOARD OF DIRECTORS NOMINEES

Below are the director nominees for election by stockholders at the 2024 Annual Meeting of Stockholders for a one-year term. All director nominees are current directors and attended 100% of all Board meetings and 100% of the sum of all meetings of the Board of Directors and its committees, as applicable.

Director	Age	Serving Since	Independent
Nancy E. Calderon	64	2019	Yes
Sarah E. Kemp	56	2019	Yes
Sunggyu Lee, Ph.D.	71	2004	Yes
G. Patrick Lynch	56	2004	No
Ramani Narayan, Ph.D.	74	2004	No
Richard J. Nigon	75	2010	Yes
Cristina Pinho	65	2023	Yes
Konstantin von Falkenhausen	56	2012	Yes

The Board of Directors recommends a vote "FOR" each of these nominees.

COMMITTEE COMPOSITION

The Board of Directors maintains a standing Audit Committee, Compensation Committee, and Nominating and Corporate Governance Committee, each comprised of the following directors:

Director	Audit Committee	Compensation Committee	Nominating and Corporate Governance Committee		
Nancy E. Calderon	•		•		
Sarah E. Kemp			•		
Sunggyu Lee, Ph.D.		•			
G. Patrick Lynch					
Ramani Narayan, Ph.D.					
Richard J. Nigon	•	•	•		
Cristina Pinho			•		
Konstantin von Falkenhausen	•	•			

KEY QUALIFICATIONS

The following are some key qualifications, skills and experiences of our directors.

Director	Leadership/ Management	Financial Expertise	International Experience	Prior Board Experience	Government Experience	Bioplastics Industry Experience
Nancy E. Calderon	•	•	•	•		
Sarah E. Kemp	•		•	•	•	
Sunggyu Lee, Ph.D.	•		•			
G. Patrick Lynch	•		•			
Ramani Narayan, Ph.D.	•		•		•	•
Richard J. Nigon	•	٠		•		
Cristina Pinho	•		•	•	•	
Konstantin von	•	٠	•			
Falkenhausen						

EXECUTIVE COMPENSATION PHILOSOPHY

Our guiding compensation philosophy is to maintain an executive compensation program that allows us to attract, retain, motivate and reward qualified and talented executives who will enable us to grow our business, achieve our annual, long-term and strategic goals and drive long-term stockholder value.

The following core principles provide a framework for our executive compensation program:

- Align interests of our executives with stockholder interests;
- Integrate compensation with our business plans and strategic goals;
- Link amount of compensation to both company and individual performance; and
- Provide fair and competitive compensation opportunities that attract and retain executives.

EXECUTIVE COMPENSATION BEST PRACTICES

Our compensation practices include many best practices that support our executive compensation objectives and principles and benefit our stockholders.

What we do:

- Emphasize pay for performance
- Structure our executive compensation so a significant portion of pay is at risk
- Structure our executive compensation so a significant portion is paid in equity
- Maintain competitive pay packages
- Maintain robust clawback policy
- Hold an annual say-on-pay vote
- Maintain stock ownership guidelines

What we don't do:

- No guaranteed salary increases or bonuses
- No repricing of stock options unless approved by stockholders
- No pledging of NTIC securities, unless certain criteria are met
- No hedging of NTIC securities
- No excessive perquisites
- No tax gross-ups

HOW WE PAY

Our executive compensation program consists of the following principal elements:

- Base salary a fixed amount, paid in cash and reviewed annually and, if appropriate, adjusted.
- Annual incentive a variable, short-term element that is typically payable in cash and is based on a corporate profitability goal and individual performance goals.
- Long-term incentive a variable, long-term element that is provided in stock options.

FISCAL 2023 EXECUTIVE COMPENSATION ACTIONS

Fiscal 2023 compensation actions and incentive plan outcomes based on performance are summarized below:

Element	Key Fiscal 2023 Actions
Base Salary	Our executives received base salary increases at the start of fiscal 2023 of 5.0%.
Annual Incentive	Our executives received annual bonuses based primarily on Adjusted EBITOI (earnings before interest, taxes, and other income, as adjusted to take into account amounts paid under bonus plan and other adjustments), in amounts representing 77.4% of their base salaries. A portion of the annual incentive earned for fiscal 2023 was paid in the form of stock option grants made at the beginning of fiscal 2023.
Long-Term Incentive	Our executives received stock option grants on September 1, 2022, which vest annually over a three-year period. The fiscal 2023 stock option grants were intended as partial payout of the fiscal 2023 annual bonus program.
Health and Welfare Benefits	No significant changes were made.
Retirement Plans	No significant changes were made.
Perquisites	No significant changes were made.

ADVISORY VOTE ON EXECUTIVE COMPENSATION

The Board of Directors is providing our stockholders with an advisory vote on our executive compensation, commonly known as a "say-on-pay" vote. We last submitted a say-on-pay proposal to our stockholders at our 2023 Annual Meeting of Stockholders held on January 20, 2023. At that meeting, approximately 92% of the votes cast by our stockholders were in favor of our say-on-pay vote.

The Board of Directors recommends a vote "FOR" the approval of our say-on-pay proposal.

RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Although stockholder ratification is not required, the appointment of Baker Tilly US, LLP as NTIC's independent registered public accounting firm for fiscal 2024 is being submitted for ratification at the 2024 Annual Meeting of Stockholders as a matter of good corporate governance.

The Board of Directors recommends a vote "**FOR**" the ratification of Baker Tilly US, LLP as NTIC's independent registered public accounting firm for fiscal 2024.

APPROVAL OF NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION 2024 STOCK INCENTIVE PLAN

The Board has approved the Northern Technologies International Corporation 2024 Stock Incentive Plan (which we refer to as the "2024 plan"). The purpose of the 2024 plan is to advance the interests of NTIC and our stockholders by enabling us to attract and retain qualified individuals to perform services for us, provide incentive compensation for such individuals in a form that is linked to the growth and profitability of our Company and increases in stockholder value, and provide opportunities for equity participation that align the interests of recipients with those of our stockholders. Our continuing ability to offer equity incentive awards is critical to our ability to attract, motivate and retain qualified personnel, particularly as we grow and in light of the highly competitive markets for employee talent in which we operate.

If our stockholders approve the 2024 plan, it will replace the Northern Technologies International Corporation Amended and Restated 2019 Stock Incentive Plan (which we refer to as the "2019 plan") and no new awards will be granted under the 2019 plan. The terms of the 2019 plan, as applicable, will continue to govern awards outstanding under the 2019 plan, until exercised, expired, paid or otherwise terminated or canceled. Other than the 2019 plan, we currently have no other equity compensation plans under which equity awards can be granted, other than the Northern Technologies International Corporation Employee Stock Purchase Plan.

The Board of Directors recommends a vote "FOR" the proposal to approve the 2024 plan.

2025 ANNUAL MEETING OF STOCKHOLDERS

We anticipate that our 2025 Annual Meeting of Stockholders will be held on or about Friday, January 17, 2025.

The following are important dates in connection with our 2025 Annual Meeting of Stockholders.

Stockholder Action	Submission Deadline
Proposal Pursuant to Rule 14a-8 of the Securities	No later than August 6, 2024
Exchange Act of 1934, as amended	
Nomination of a Candidate Pursuant to our Bylaws	Between September 21, 2024 and
	October 21, 2024
Proposal of Other Business for Consideration	Between September 21, 2024 and
Pursuant to our Bylaws	October 21, 2024

OUR COMMITMENT TO ENVIRONMENTAL, SOCIAL AND GOVERNANCE PRINCIPLES

ESG APPROACH AND MISSION

At NTIC, we are committed to creating a more sustainable future. We convert unique, environmentally beneficial materials science into value-added products and services for industrial and consumer applications. Our research and development teams deliver innovative technologies and products that address climate change, use renewable materials, and enable sustainable waste management. We do this while maintaining the highest performance and processability.

ESG COMMITMENTS

Environmental: We are committed to operating in an environmentally responsible manner, as set forth in our Policy Statement on Health, Safety and Environment, in order to reduce our impact on climate change, conserve natural resources and operate in compliance with environmental regulations.

Social: We are committed to being a socially responsible employer by prioritizing health and safety, as set forth in our Policy Statement on Health, Safety and Environment, and fostering an environment of diversity and inclusion across our business, as set forth in our Human Rights Policy.

Governance: We are committed to building a culture dedicated to ethical business behavior and responsible corporate activity, as set forth in our Code of Ethics. We believe strong corporate governance is the foundation to delivering on our commitments.

ESG INITIATIVES

- ✓ We utilize electricity generated by 100% renewable sources, through the purchase of energy offset credits, for all NTIC facilities in the United States. This annually offsets greenhouse gas emissions equivalent to 380 metric tons of carbon dioxide, which is the equivalent energy used by 47.8 average households in one year.
- \checkmark We develop technologies that support green manufacturing processes and energy production.
- ✓ Our corrosion management solutions are used for product packaging, rust prevention, and rust removers to reduce the impact manufacturing has on the environment by preserving metal assets, reducing waste and energy required to make new items, aiding in the refurbishing and remanufacturing of used metal items, preventing waste by enabling the recycling of rusted metal items, providing alternative solutions from the use of oil and solvents to protect metal assets, and offering recyclable and compostable products.
- ✓ Our oil and gas products reduce the environmental impact of the oil and gas industry by reducing the waste of metal assets and fossil fuels, preventing spillage and leaks, and extending the service life of metal assets.
- ✓ Our oil and gas solutions are designed to meet stringent Environmental Protection Agency regulations.
- ✓ Our Natur-Tec[®] bioplastics business supports the sustainability goals of people and companies by enabling users to reduce their carbon footprint, offering high-quality certified bio-based and 100% compostable resins and products, and researching new technologies to improve sustainable product choices.
- ✓ Our Board of directors and executive leadership team is committed to building a diverse and inclusive workforce and is committed to equal opportunity in regard to all hiring decisions, including the hiring/promoting of management positions and Board of Director appointments.

- ✓ Our efforts to diversify its workforce have resulted in a workforce that is comprised of 42% female employees and 29% racially or ethnically diverse employees and a management team that is comprised of 40% female leaders and 23% racially or ethnically diverse leaders.
- ✓ We believe that sustainability means being a responsible and ethical corporate citizen, and we support employees as they give back to the communities in which they live and work by engaging in efforts to strengthen community relationships and foster employee engagement.

HEALTH, SAFETY AND ENVIRONMENT

Health, safety and environment are the cornerstone of NTIC. We are in the business of converting unique, environmentally beneficial materials science into value added products and services for industrial and consumer applications. We believe that we are responsible to our worldwide customers, our people, our communities and our stockholders, and we take these responsibilities seriously. We are dedicated to investing in the future of the planet and our people and we intend to continue to invest in health, safety and environmental protection and improvements in a timely manner consistent with available technology.

We are guided by our Policy Statement on Health, Safety and Environment, which describes our health, safety and environmental objectives, including ensuring that all activities across the value chain are conducted in a manner consistent with our quality management standard and health, safety and environmental programs, ensuring that business activities are conducted to prevent harm and protect health and safety, and developing, manufacturing, distributing and marketing products and services with full regard for health, safety and environmental aspects. To accomplish these objectives, we intend to establish targets within our quality management standard and health, safety and environmental programs to measure progress and ensure continuous improvement, provide safe and healthy workplaces for our employees and contractors, and provide continued training to enable employees to meet their responsibility to contribute to compliance with our health, safety and environmental objectives.

ENVIRONMENTAL MANAGEMENT SYSTEM POLICY

NTIC has an environmental management system to establish the operational controls related to the identified significant environmental aspects of NTIC's international operations and activities, the goods and services used by NTIC and communicating relevant requirements to our suppliers and subcontractors. Our Environmental Management System Policy is administered by our Chief Executive Officer and relates to the development and implementation of plans and activities to minimize, avoid and manage impacts on the environment. Significant aspects include disposal of scrap film generated by subcontractors, recycling and composting internally generated waste, electricity, lighting, heating and cooling of our buildings, handling, storage and disposal of hazardous material, and the disposal of NTIC product after use. NTIC strives to abide by all applicable laws, regulations and internal standards.

DIVERSITY AND INCLUSION; CODE OF ETHICS

Diversity and inclusion are embedded in our values and integrated into our strategies. Our Human Rights Policy was designed to align with the United Nations Global Compact and core elements of the United Nations Universal Declaration of Human Rights. We are committed to providing an environment free of discrimination and harassment, where all individuals are treated with respect and dignity, can contribute fully, and have equal opportunities. We have worked to build a diverse and inclusive workforce and are committed to equal opportunity. We invest in building diverse talent pools and provide training to improve skills where appropriate. We uphold and support the right to equal treatment without discrimination or harassment, as reflected in our Equal Opportunity, Non-Discrimination, and Anti-Harassment Policy. The Board of Directors has adopted a Code of Ethics, which applies to all of our directors, executive officers, including our Chief Executive Officer and Chief Financial Officer, and employees.

SUPPLIER CONDUCT

At NTIC, our company values are respect, integrity, innovation, stewardship and excellence. Our Vendor Code of Conduct sets forth the requirements that we expect our vendors to comply with in order to operate lawfully, ethically and with integrity in every jurisdiction where they conduct business. This policy sets forth our expectations for our vendors with respect to anti-bribery and anti-corruption, international trade sanctions laws, antitrust laws, employee health and safety laws, environmental laws, gifts, entertainment and hospitality, anti-human trafficking and anti-modern slavery and other conduct. NTIC takes pride in setting an example by holding itself to high standards. This includes ensuring that our supply partners and vendors who are essential for doing business embody these beliefs as well.

ESG OVERSIGHT

Our Nominating and Corporate Governance Committee is responsible for overseeing NTIC's ESG activities, including disclosures. In doing so, the Nominating and Corporate Governance Committee periodically reviews and discusses with senior management the type and presentation of NTIC's key ESG disclosures and the adequacy and effectiveness of applicable internal controls related to such disclosures. In carrying out its responsibilities for ESG oversight, the Nominating and Corporate Governance Committee coordinates with and solicits input from the Compensation Committee and the Audit Committee in formulating the approach to NTIC's ESG activities. Our Compensation Committee is responsible for overseeing and periodically reviewing NTIC's culture and policies and strategies related to human capital management, including with respect to diversity and inclusion initiatives, pay equity, talent, recruitment and development, performance management and employee engagement. Our Audit Committee has oversight over general compliance with applicable laws as well as risk management.



4201 Woodland Road, Circle Pines, Minnesota 55014

PROXY STATEMENT FOR ANNUAL MEETING OF STOCKHOLDERS January 19, 2024

The Board of Directors of Northern Technologies International Corporation is soliciting your proxy for use at the 2024 Annual Meeting of Stockholders to be held on Friday, January 19, 2024. The Board of Directors expects to make available to our stockholders beginning on or about December 4, 2023 the Notice of Annual Meeting of Stockholders, this proxy statement and a form of proxy on the Internet or will mail these materials to stockholders of NTIC upon their request.

GENERAL INFORMATION ABOUT THE ANNUAL MEETING AND VOTING

Date, Time, Place and Purposes of Meeting

The Annual Meeting of Stockholders of Northern Technologies International Corporation (sometimes referred to as "NTIC," "we," "our" or "us" in this proxy statement) will be held on Friday, January 19, 2024, at 8:00 a.m., Central Time, at the principal executive offices of Northern Technologies International Corporation located at 4201 Woodland Road, Circle Pines, Minnesota 55014, for the purposes set forth in the Notice of Annual Meeting of Stockholders.

Who Can Vote

Stockholders of record at the close of business on November 21, 2023 will be entitled to notice of and to vote at the meeting or any adjournment of the meeting. As of that date, there were 9,427,599 shares of our common stock outstanding. Each share of our common stock is entitled to one vote on each matter to be voted on at the Annual Meeting. Stockholders are not entitled to cumulate voting rights.

How You Can Vote

Your vote is important. Whether you hold shares directly as a stockholder of record or beneficially in "street name" (through a broker, bank or other nominee), you may vote your shares without attending the Annual Meeting. You may vote by granting a proxy or, for shares held in street name, by submitting voting instructions to your broker, bank or other nominee.

If you are a registered stockholder whose shares are registered in your name, you may vote your shares in person at the meeting or by one of the three following methods:

- Vote by Internet, by going to the website address *www.proxyvote.com* and following the instructions for Internet voting shown on the Notice of Internet Availability of Proxy Materials or on your proxy card.
- Vote by Telephone, by dialing 1-800-690-6903 and following the instructions for telephone voting shown on the Notice of Internet Availability of Proxy Materials or on your proxy card.
- Vote by Proxy Card, by completing, signing, dating and mailing the enclosed proxy card in the envelope provided if you received a paper copy of these proxy materials.

If you vote by Internet or telephone, please do not mail your proxy card.

If your shares are held in "street name" (through a broker, bank or other nominee), you may receive a separate voting instruction form with this proxy statement or you may need to contact your broker, bank or other nominee to determine whether you will be able to vote electronically using the Internet or telephone.

The deadline for voting by telephone or by using the Internet is 11:59 p.m., Eastern Time (10:59 p.m., Central Time), on the day before the date of the Annual Meeting or any adjournments thereof. Please see the Notice of Internet Availability of Proxy Materials, your proxy card or the information your bank, broker, or other holder of record provided to you for more information on your options for voting.

If you return your signed proxy card or use Internet or telephone voting before the Annual Meeting, the named proxies will vote your shares as you direct. You have three choices on each matter to be voted on.

For Proposal One—Election of Directors, you may:

- Vote FOR all eight nominees for director,
- WITHHOLD your vote from all eight nominees for director or
- WITHHOLD your vote from one or more of the eight nominees for director.

For each of the other proposals, you may:

- Vote **FOR** the proposal,
- Vote **AGAINST** the proposal or
- **ABSTAIN** from voting on the proposal.

If you send in your proxy card or use Internet or telephone voting, but do not specify how you want to vote your shares, the proxies will vote your shares **FOR** all eight of the nominees for election to the Board of Directors in Proposal One—Election of Directors and **FOR** each of the other proposals.

How Does the Board Recommend that You Vote

The Board of Directors unanimously recommends that you vote:

- **FOR** all eight of the nominees for election to the Board of Directors in Proposal One— Election of Directors;
- FOR Proposal Two—Advisory Vote on Executive Compensation;
- **FOR** Proposal Three—Ratification of Appointment of Independent Registered Public Accounting Firm; and
- FOR Proposal Four—Approval of Northern Technologies International Corporation 2024 Stock Incentive Plan.

How You May Change Your Vote or Revoke Your Proxy

If you are a stockholder whose shares are registered in your name, you may revoke your proxy at any time before it is voted by one of the following methods:

- Submitting another proper proxy with a more recent date than that of the proxy first given by following the Internet or telephone voting instructions or completing, signing, dating and returning a proxy card to us;
- Sending written notice of your revocation to our Corporate Secretary; or
- Attending the Annual Meeting and voting by ballot.

Quorum Requirement

The presence at the Annual Meeting, in person or by proxy, of the holders of a majority (4,713,800 shares) of the outstanding shares of our common stock as of the record date will constitute a quorum for the transaction of business at the Annual Meeting. In general, shares of our common stock represented by proxies marked "For," "Against," "Abstain" or "Withheld" are counted in determining whether a quorum is present. In addition, a "broker non-vote" is counted in determining whether a quorum is present. A "broker non-vote" is a proxy returned by a broker on behalf of its beneficial owner customer that is not voted on a particular matter because voting instructions have not been received by the broker from the customer, and the broker has no discretionary authority to vote on behalf of such customer on such matter.

Vote Required

Proposal One—Election of Directors will be decided by the affirmative vote of a plurality of shares of our common stock present in person or represented by proxy and entitled to vote at the Annual Meeting. A "plurality" for Proposal One means the individuals who receive the greatest number of votes cast "For" are elected as directors. However, under our Corporate Governance Guidelines, in an uncontested election of directors, any nominee for director who receives a greater number of votes "withheld" from his or her election than votes "for" his or her election by stockholders present in person or by proxy at the Annual Meeting and entitled to vote in the election of directors is required to tender a written offer to resign from the Board of Directors within five business days of the certification of the stockholder vote by the Inspector of Elections.

Proposal Two—Advisory Vote on Executive Compensation will be decided by the affirmative vote of a majority of shares of our common stock present in person or represented by proxy and entitled to vote at the Annual Meeting. Although this is a non-binding, advisory vote, the Compensation Committee and Board of Directors expect to take into account the outcome of the vote when considering future executive compensation decisions.

Proposal Three—Ratification of Appointment of Independent Registered Public Accounting Firm will be decided by the affirmative vote of a majority of shares of our common stock present in person or represented by proxy and entitled to vote at the Annual Meeting.

Proposal Four—Approval of Northern Technologies International Corporation 2024 Stock Incentive Plan will be decided by the affirmative vote of a majority of shares of our common stock present in person or represented by proxy and entitled to vote at the Annual Meeting.

If your shares are held in "street name" and you do not indicate how you wish to vote, your broker is permitted to exercise its discretion to vote your shares only on certain "routine" matters. Proposal One— Election of Directors, Proposal Two—Advisory Vote on Executive Compensation and Proposal Four— Approval of Northern Technologies International Corporation 2024 Stock Incentive Plan are not "routine" matters. Accordingly, if you do not direct your broker how to vote, your broker may not exercise discretion and may not vote your shares on any of these two proposals. This is called a "broker non-vote," and although your shares will be considered to be represented by proxy at the meeting, they will not be considered to be shares "entitled to vote" or "votes cast" at the meeting and will not be counted as having been voted on the applicable proposal. Proposal Three—Ratification of Appointment of Independent Registered Public Accounting Firm is a "routine" matter, and, as such, your broker is permitted to exercise its discretion to vote your shares for or against the proposals in the absence of your instruction.

Proposal	Votes Required	Effect of Votes Withheld / Abstentions	Effect of Broker Non-Votes
<u>Proposal One</u> : Election of Directors	Plurality of the voting power of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors. This means that the eight nominees receiving the highest number of affirmative "FOR" votes will be elected as directors. ⁽¹⁾	Votes withheld will have no effect, unless there are more votes withheld than "FOR" votes. ⁽¹⁾	Broker non- votes will have no effect.
<u>Proposal Two</u> : Advisory Vote on Executive Compensation	Affirmative vote of a majority of the voting power of the shares present or represented by proxy at the meeting and entitled to vote on the proposal.	Abstentions will have the effect of a vote against the proposal.	Broker non- votes will have no effect.
<u>Proposal Three</u> : Ratification of Appointment of Independent Registered Public Accounting Firm	Affirmative vote of a majority of the voting power of the shares present or represented by proxy at the meeting and entitled to vote on the proposal.	Abstentions will have the effect of a vote against the proposal.	We do not expect any broker non- votes on this proposal.

		Effect of Votes Withheld /	Effect of Broker
Proposal	Votes Required	Abstentions	Non-Votes
Proposal Four: Approval of Northern Technologies International Corporation 2024 Stock Incentive Plan	Affirmative vote of a majority of the voting power of the shares present or represented by proxy at the meeting and entitled to vote on the proposal. ⁽²⁾	Abstentions will have the effect of a vote against the proposal.	Broker non- votes will have no effect.

- ⁽¹⁾ Under our Corporate Governance Guidelines, in an uncontested election of directors, any nominee for director who receives a greater number of votes "withheld" from his or her election than votes "for" his or her election by stockholders present in person or by proxy at the Annual Meeting and entitled to vote in the election of directors is required to tender a written offer to resign from the Board of Directors within five business days of the certification of the stockholder vote by the Inspector of Elections.
- ⁽²⁾ While the Nasdaq rules require a minimum vote requirement for this proposal of approval by a "majority of votes cast," our Bylaws provide for a more stringent vote requirement to pass the proposal since abstentions have the effect of a vote against the proposal under our Bylaws and Delaware law, and therefore is the vote required to pass the proposal.

Other Business

Our management does not intend to present other items of business and knows of no items of business that are likely to be brought before the Annual Meeting, except those described in this proxy statement. However, if any other matters should properly come before the Annual Meeting, the persons named on the proxy card will have discretionary authority to vote such proxy in accordance with their best judgment on the matters.

Procedures at the Annual Meeting

The presiding officer at the Annual Meeting will determine how business at the meeting will be conducted. Only matters brought before the Annual Meeting in accordance with our Bylaws will be considered. Only a natural person present at the Annual Meeting who is either one of our stockholders, or is acting on behalf of one of our stockholders, may make a motion or second a motion. A person acting on behalf of a stockholder must present a written statement executed by the stockholder or the duly-authorized representative of the stockholder on whose behalf the person purports to act.

Householding of Annual Meeting Materials

Some banks, brokers and other nominee record holders may be participating in the practice of "householding" proxy statements, annual reports and the Notice of Internet Availability of Proxy Materials. This means that only one copy of this proxy statement, our Annual Report to Stockholders or the Notice of Internet Availability of Proxy Materials may have been sent to multiple stockholders in each household, unless contrary instructions have been given. We will promptly deliver a separate copy of any of these documents to any stockholder upon written or oral request to our Stockholder Information Department, Northern Technologies International Corporation, 4201 Woodland Road, Circle Pines, Minnesota 55014, telephone: (763) 225-6637. Any stockholder who wants to receive separate copies of this proxy statement, our Annual Report to Stockholders or the Notice of Internet Availability of Proxy Materials in the future, or any stockholder who is receiving multiple copies and would like to receive only

one copy per household, should contact the stockholder's bank, broker or other nominee record holder, or the stockholder may contact us at the above address and telephone number.

Proxy Solicitation Costs

The cost of soliciting proxies, including the preparation, assembly, electronic availability and mailing of proxies and soliciting material, as well as the cost of making available or forwarding this material to the beneficial owners of our common stock, will be borne by NTIC. Our directors, officers and regular employees may, without compensation other than their regular compensation, solicit proxies by telephone, e-mail, facsimile or personal conversation. We may reimburse brokerage firms and others for expenses in making available or forwarding solicitation materials to the beneficial owners of our common stock.

PROPOSAL ONE-ELECTION OF DIRECTORS

Number of Directors

Our Second Amended and Restated Bylaws provide that the Board of Directors will consist of that number of directors as may be determined by the Board of Directors or by the stockholders at an annual meeting. The Board of Directors has fixed the number of directors at eight.

Nominees for Director

The Board of Directors has nominated the following eight individuals to serve as our directors until the next annual meeting of stockholders or until their successors are elected and qualified. All nominees named below are current members of the Board of Directors.

- Nancy E. Calderon
- Sarah E. Kemp
- Sunggyu Lee, Ph.D.
- G. Patrick Lynch

- Ramani Narayan, Ph.D.
- Richard J. Nigon
- Cristina Pinho
- Konstantin von Falkenhausen

Dinastan

Proxies can only be voted for the number of persons named as nominees in this proxy statement, which is eight. If prior to the Annual Meeting, the Board of Directors should learn that any nominee will be unable to serve for any reason, the proxies that otherwise would have been voted for this nominee will be voted for a substitute nominee as selected by the Board. Alternatively, the proxies, at the Board's discretion, may be voted for that fewer number of nominees as results from the inability of any nominee to serve. The Board of Directors has no reason to believe that any of the nominees will be unable to serve.

Information about Current Directors and Board Nominees

The following table sets forth as of November 21, 2023 the name, age and principal occupation of each current director and each individual who has been nominated by the Board of Directors to serve as a director of NTIC, as well as how long each individual has served as a director of NTIC.

Name	Age	Principal Occupation	Director
Nancy E. Calderon ⁽¹⁾⁽²⁾	64	Former Partner of KPMG LLP	2019
Sarah E. Kemp ⁽²⁾	56	Vice President, International Government Affairs of Intel Corporation	2019
Sunggyu Lee, Ph.D. ⁽³⁾	71	Chief Technologist of Chemtech Innovators LLC	2004
G. Patrick Lynch	56	President and Chief Executive Officer of NTIC	2004
Ramani Narayan, Ph.D.	74	Distinguished Professor in Department of Chemical Engineering & Materials Science at Michigan State University	2004
Richard J. Nigon ⁽¹⁾⁽²⁾⁽³⁾	75	Senior Vice President of Cedar Point Capital, Inc.	2010
Cristina Pinho ⁽²⁾	65	Chair of the Board of Instituto Luísa Pinho Sartori	2023
Konstantin von Falkenhausen ⁽¹⁾⁽³⁾	56	Partner of B Capital Partners AG	2012

(1) Member of the Audit Committee

(2) Member of the Nominating and Corporate Governance Committee

(3) Member of the Compensation Committee

Additional Information about Current Directors and Board Nominees

The following paragraphs provide information about each current director and nominee for director, including all positions he or she holds, his or her principal occupation and business experience for the past five years, and the names of other publicly-held companies of which the director or nominee currently serves as a director or has served as a director during the past five years. We believe that all of our directors and nominees display personal and professional integrity; satisfactory levels of education and/or business experience; broad-based business acumen; an appropriate level of understanding of our business and its industry and other industries relevant to our business; the ability and willingness to devote adequate time to the work of the Board of Directors and its committees; a fit of skills and personality with those of our other directors that helps build a board that is effective, collegial and responsive to the needs of NTIC; strategic thinking and a willingness to share ideas; a diversity of experiences, expertise and background; and the ability to represent the interests of all of our stockholders. The information presented below regarding each director and nominee also sets forth specific experience, qualifications, attributes and skills that led the Board of Directors to the conclusion that such individual should serve as a director in light of our business and structure.

Nancy E. Calderon has been a director of NTIC since October 2019. Ms. Calderon is a CPA and retired from KPMG LLP in September 2019 after a distinguished 33-year career. Until her retirement, Nancy served as Global Lead Partner for a Fortune 40 Technology company, managing a global team of over 500 professionals in more than 50 countries, a position she held since July 2012, senior partner of KPMG's Board Leadership Center from its inception in 2015, and as a director of KPMG's Global Delivery Center in India and its related holding companies since September 2011. Previously, she was KPMG's Americas Chief Administrative Officer and U.S. National Partner in Charge, Operations from July 2008 to June 2012. Ms. Calderon has sat on a number of KPMG committees, including the Americas Region Management Committee, Enterprise Risk Management, Privacy, Pension Steering and Investment, Social Media and Knowledge Management. She currently serves on the board of directors of Belden Inc. We believe Ms. Calderon's qualifications to sit on the Board of Directors include her extensive financial accounting experience with KPMG and her current and prior experience on boards of directors, including, in particular, her experience serving on the audit committees of Arcimoto, Inc.; Belden, Inc.; KPMG's Global Delivery Center; Women Corporate Directors Foundation and the New York YMCA. Ms. Calderon received a Bachelor of Science from UC Berkeley's Haas Business School and a Master of Science from Golden Gate University.

Sarah E. Kemp has been a director of NTIC since October 2019. Ms. Kemp is Vice President, International Government Affairs for Intel Corporation. Before joining Intel Corporation in February 2022, Ms. Kemp was the Associate Vice President for Organon, a global biopharmaceutical company where she lead Global Women's Health Policy and ESG, a position she served since April 2021. Prior to Organon, Ms. Kemp lead Merck's Policy Communication and Population Health organization responsible for emerging markets from November 2020 to April 2021. Prior to this role, she was the Executive Director, Public Policy and Commercial Strategies for China and the Asia Pacific from July 2019 to October 2020. Before joining Merck, Ms. Kemp was the Deputy Under Secretary, for the International Trade Administration at the U.S. Department of Commerce in Washington, D.C., from February 2017 to July 2019. In this role, she oversaw a \$485 million annual budget and 2,100 trade and investment professionals based in 108 US cites and 76 markets around the world. Prior to her time in D.C., she was the Minister Counselor for Commercial Affairs at the U.S. Embassy in Beijing, overseeing the U.S. Department of Commerce's trade promotion and trade policy activities in its operations in Beijing, Chengdu, Shanghai, Wuhan, Shenyang and Guangzhou. In this capacity, she was a key advisor to the Ambassador and advised U.S. CEOs-from fortune 500 companies to SME's-on China business strategy, market access, export promotion, anti-dumping / countervailing duty cases, intellectual property protection and export controls. As a career Foreign Commercial Service Officer, she served as the

Country Manager in China and Vietnam, and had multiple postings in Beijing, Hong Kong and Bangkok. Ms. Kemp joined Commerce as a Presidential Management Fellow. Ms. Kemp served on the board of directors of the Concordia International School in Hanoi, Vietnam, an international day school offering preschool through high school education, from 2012-2014 and was the Co-Chair of Women Corporate Directors in Vietnam from 2011-2014 and in Beijing from 2009-2011. Ms. Kemp serves on the Advisory Board of Indiana University's Manufacturing Policy Initiative and is on the Board of the Center for International Private Enterprise. We believe Ms. Kemp's qualifications to sit on the Board of Directors include her extensive knowledge and experience in international commerce, particularly with regard to Asia Pacific and Greater China, her prior board experience and her in depth experience in international and public affairs. Ms. Kemp received her Master of Business Administration from the Chinese University of Hong Kong, her Master of Public Administration from Columbia University and her Bachelor of Arts in Physiological–Anthropology from Hamilton College.

Sunggyu Lee, Ph.D. has been a director of NTIC since January 2004. Dr. Lee is Chief Technologist, Chemtech Innovators LLC, Akron, Ohio. Previously, he held positions of Russ Ohio Research Scholar and Professor of Chemical and Biomolecular Engineering, Ohio University, Athens, Ohio from 2010 to 2020, Professor of Chemical and Biological Engineering, Missouri University of Science and Technology, Rolla, Missouri from 2005 to 2010, C.W. LaPierre Professor and Chairman of Chemical Engineering at University of Missouri-Columbia from 1997 to 2005, and Robert Iredell Professor and Head of Chemical Engineering Department at the University of Akron, Akron, Ohio from 1988 to 1996. He has authored 12 books and over 550 archival publications and received 35 U.S. patents in a variety of chemical and polymer processes and products. He is currently serving as Editor of Encyclopedia of Chemical Processing, Taylor & Francis, New York, New York and also as Book Series Editor of Green Chemistry and Chemical Engineering, CRC Press, Boca Raton, Florida. Throughout his career, he has served as consultant and technical advisor to a number of national and international companies in the fields of polymers, petrochemicals and energy. He received his Ph.D. from Case Western Reserve University, Cleveland, Ohio in 1980. We believe Dr. Lee's qualifications to sit on the Board of Directors include his significant technical and industrial expertise with chemical and polymer processes and products. Such expertise is particularly helpful with respect to assessing and operating NTIC's ZERUST[®] industrial business.

G. Patrick Lynch, an employee of NTIC since 1995, has been President since July 2005 and Chief Executive Officer since January 2006 and has served as a director of NTIC since February 2004. Mr. Lynch served as President of North American Operations of NTIC from May 2004 to July 2005. Prior to May 2004, Mr. Lynch held various positions with NTIC, including Vice President of Strategic Planning, Corporate Secretary and Project Manager. Mr. Lynch is also an officer and director of Inter Alia Holding Company, which is a significant stockholder of NTIC. Prior to joining NTIC, Mr. Lynch held positions in sales management for Fuji Electric Co., Ltd. in Tokyo, Japan, and programming project management for BMW AG in Munich, Germany. Mr. Lynch received a Master of Business Administration degree from the University of Michigan Ross School of Business. We believe Mr. Lynch's qualifications to sit on the Board of Directors include his depth of knowledge of NTIC and its day-to-day operations in light of his position as Chief Executive Officer of NTIC, as well as his affiliation with a significant stockholder of NTIC, which the Board of Directors believes generally helps align management's interests with those of our stockholders.

Ramani Narayan, Ph.D. has been a director of NTIC since November 2004. He is a Distinguished Professor at Michigan State University in the Department of Chemical Engineering & Materials Science, where he has 200+ refereed publications in leading journals to his credit, 19 patents, edited three books and one expert dossier in the area of bio-based polymeric materials. His research encompasses design and engineering of sustainable, biobased products, biodegradable plastics and polymers, biofiber reinforced composites, reactive extrusion polymerization and processing, studies in plastic end-of-life options like biodegradation and composting. He conducts carbon footprint calculations for plastics and products. He also performs LCA (Life Cycle Assessment) for reporting a product's environmental footprint. He serves as Scientific Chair of the Biodegradable Products Institute (BPI), North America. He served on the Technical Advisory Board of Tate & Lyle. He served on the Board of Directors of ASTM International, an international standard setting organization and was the founding Chair of the committee on Environmentally Degradable Plastics and Biobased Products (D20.96) and the Plastics Terminology Committee (D20.92). Dr. Narayan is also the technical expert for the United States on ISO (International Standards Organization) TC 61 on Plastics-specifically for Terminology, Biobased and Biodegradable Plastics. He has won numerous awards, including the Named MSU University Distinguished Professor in 2007; the Governors University Award for commercialization excellence; Michigan State University Distinguished Faculty Award, 2006, 2005 Withrow Distinguished Scholar award, Fulbright Distinguished Lectureship Chair in Science & Technology Management & Commercialization (University of Lisbon; Portugal); First recipient of the William N. Findley Award, The James Hammer Memorial Lifetime Achievement Award, and Research and Commercialization Award sponsored by ICI Americas, Inc. & the National Corn Growers Association. We believe Dr. Narayan's qualifications to sit on the Board of Directors include his significant technical expertise in the bioplastics area which has been helpful to NTIC's management in assessing and operating NTIC's Natur-Tec[®] bioplastics business.

Richard J. Nigon has been a director of NTIC since February 2010 and non-executive Chairman of the Board since November 2012. Mr. Nigon is the Senior Vice President of Cedar Point Capital, Inc., a private company that raises capital for early stage companies. From February 2001 until May 2007, Mr. Nigon was a Director of Equity Corporate Finance for Miller Johnson Steichen Kinnard (MJSK), a privately held investment firm. In December 2006, MJSK was acquired by Stifel Nicolaus, and Mr. Nigon was a Managing Director of Private Placements at Stifel Nicolaus. From February 2000 to February 2001, Mr. Nigon served as the Chief Financial Officer of Dantis, Inc., a web hosting company. Prior to joining Dantis, Mr. Nigon was employed by Ernst & Young, LLP from 1970 to 2000, where he served as a partner from 1981 to 2000. While at Ernst & Young, Mr. Nigon served as the Director of Ernst & Young's Twin Cities Entrepreneurial Services Group and was the coordinating partner on several publicly-traded companies in the consumer retailing and manufacturing sectors. In addition to NTIC, Mr. Nigon also serves on the board of directors of Celcuity Inc. and as chairperson of its audit committee and serves on the board of directors of a number of privately-held companies. Mr. Nigon previously served on the board of directors of Tactile Systems Technology, Inc., Virtual Radiologic Corporation and Vascular Solutions, Inc. until its acquisition by Teleflex Incorporated in February 2017. Through his 30 years of service at Ernst & Young, LLP, Mr. Nigon brings to NTIC's Board of Directors, and in particular the Audit Committee, extensive public accounting and auditing experience. The Board believes Mr. Nigon's strong background in financial controls and reporting, financial management, financial analysis and SEC reporting requirements is critical to the Board's oversight responsibilities. In addition, his strategic planning expertise and other experiences gained through his management and leadership roles at private investment firms that have invested in early stage companies, is helpful to the Board in assessing and operating NTIC's newer businesses.

Cristina Pinho has been a director of NTIC since January 2023. Ms. Pinho is Chair of the Board of Instituto Luísa Pinho Sartori, a nonprofit organization in Brazil whose mission is to support and incentivize conservationists and biologists to work on environmental protection, a position she has held since April 2015. Ms. Pinho is also an independent board director of Ocyan, a private company, a position she has held since August 2020. Ms. Pinho is a member of a sounding board of Shell Brazil, a position she has held since June 2023. From November 2019 to January 2022, she served as Corporate Executive Director at Brazilian Petroleum and Gas Institute, a nonprofit organization in Brazil, formed by major oil and gas producers in Brazil and petroleum products service companies. From January 2019 to November 2019, Ms. Pinho served as Undersecretary of Energy, Petroleum and Gas at Rio de Janeiro State. From 2012 to 2015, she served as Executive Manager of E&P Services and Logistics for Petrobras. We believe Ms. Pinho's qualifications to sit on the Board of Directors include her extensive experience in the oil and gas industry in Brazil and her extensive experience in ESG matters. Ms. Pinho received an ESG Competent Boards Certificate in 2021 and is a graduate of the Columbia Senior Executive Program at the Columbia Business School and also received a Digital Strategy for Business degree from the Columbia Business School in 2018. She has also received an MBA CoppeAd UFRJ; Senior Strategic Management, MBA Fundação Getúlio Vargas, Business and Strategic Management and a Mechanical Engineering degree from the Universidade Federal do Rio de Janeiro.

Konstantin von Falkenhausen has been a director of NTIC since November 2012. Mr. von Falkenhausen is currently a Partner of B Capital Partners AG, an independent investment advisory boutique focused on infrastructure, public private partnerships and clean energy. In this capacity, since April 2018, Mr. von Falkenhausen has been a Director of the general partner of the B Capital Energy Transition Infrastructure Fund SICAV-SIF, an investment fund registered with the Luxembourg financial authorities CSSF. From February 2004 to March 2008, Mr. von Falkenhausen served as a Partner of capiton AG, a private equity firm located in Berlin, Germany. From March 2003 to February 2004, he served as interim Chief Financial Officer of Neon Products GmbH, a privately held neon lighting company. From May 1999 to February 2003, Mr. von Falkenhausen served as an investment manager of West Private Equity Ltd. and an investment director of its German affiliate West Private Capital GmbH. Prior to May 1999, Mr. von Falkenhausen served in several positions with BankBoston Robertson Stephens International Ltd., an investment banking firm. Mr. von Falkenhausen is a citizen of Germany. He has a Master's degree in economics (lic. oec) from the University of Fribourg (Switzerland) and a Masters of Business Administration from the University of Chicago. We believe Mr. von Falkenhausen's qualifications to sit on the Board of Directors include his experience with several private investment and equity firms that have invested in early stage companies, which the Board believes is helpful in assessing and operating NTIC's newer businesses, and his financial expertise, which the Board believes is helpful in analyzing NTIC's financial performance.

Board Recommendation

The Board of Directors unanimously recommends a vote **FOR** the election of all of the eight nominees named above.

The Board of Directors Recommends a Vote FOR Each Nominee for Director



PROPOSAL TWO—ADVISORY VOTE ON EXECUTIVE COMPENSATION

Introduction

The Board of Directors is providing stockholders with an advisory vote on executive compensation pursuant to the Dodd-Frank Wall Street Consumer Protection Act and Section 14A of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). This advisory vote, commonly known as a "say-on-pay" vote, is a non-binding vote on the compensation paid to our named executive officers as set forth in the "*Executive Compensation*" section of this proxy statement beginning on page 67. At the 2023 Annual Meeting of Stockholders held on January 20, 2023, approximately 92% of the votes cast by our stockholders were in favor of our say-on-pay vote. The Compensation Committee generally believes that such results affirmed stockholder support of our approach to executive compensation.

Our executive compensation program is generally designed to attract, retain, motivate and reward highly qualified and talented executive officers. The underlying core principles of our executive compensation program are:

- To align the interests of our executives with those of our stockholders;
- Integrate compensation with our business plans and strategic goals;
- Link amount of compensation to both company and individual performance goals; and
- Provide fair and competitive compensation opportunities that attract and retain executives.

The "*Executive Compensation*" section of this proxy statement, which begins on page 67, describes our executive compensation program and the executive compensation decisions made by the Compensation Committee and Board of Directors for fiscal 2023 in more detail. Important considerations include:

- A significant portion of the compensation paid or awarded to our named executive officers in fiscal 2023 was "performance-based" or "at-risk" compensation that is tied directly to the achievement of financial and other performance goals or long-term stock price performance.
- Equity-based compensation granted to our named executive officers is in the form of stock options and aligns the long-term interests of our executives with the long-term interests of our stockholders. In response to a concern raised by one of our stockholders, stock options granted to our executives now vest annually over a three-year period as opposed to a one-year period.
- Our executive officers receive only modest perquisites and have modest severance and change-in-control arrangements.
- We have adopted a clawback policy.
- We do not provide any tax "gross-up" payments.

Accordingly, the Board of Directors recommends that our stockholders vote in favor of the say-on-pay vote as set forth in the following resolution:

RESOLVED, that our stockholders approve, on an advisory basis, the compensation paid to our named executive officers, as disclosed in this proxy statement.

Stockholders are not ultimately voting to approve or disapprove the recommendation of the Board of Directors. As this is an advisory vote, the outcome of the vote is not binding on us with respect to future executive compensation decisions, including those relating to our named executive officers, or otherwise. The Compensation Committee and Board of Directors expect to take into account the outcome of this advisory vote when considering future executive compensation decisions.

In accordance with the result of our most recent advisory vote on the frequency of the say-on-pay vote, which was conducted at our 2020 Annual Meeting of Stockholders, the Board of Directors has determined that we will conduct an executive compensation advisory vote on an annual basis. Accordingly, after this Annual Meeting, the next say-on-pay vote will occur at our next Annual Meeting of Stockholders anticipated to be held in January 2025. We anticipate that the next say-on-frequency vote will occur at our 2026 Annual Meeting of Stockholders.

Board Recommendation

The Board of Directors unanimously recommends a vote **FOR** approval, on an advisory basis, of the compensation paid to our named executive officers, as disclosed in this proxy statement.

The Board of Directors Recommends a Vote FOR Proposal Two

27

PROPOSAL THREE—RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Appointment of Independent Registered Public Accounting Firm

The Audit Committee of the Board of Directors appoints our independent registered public accounting firm. In this regard, the Audit Committee evaluates the qualifications, performance and independence of our independent registered public accounting firm and determines whether to re-engage our current independent registered public accounting firm. As part of its evaluation, the Audit Committee considers, among other factors, the quality and efficiency of the services provided by the firm, including the performance, technical expertise, and industry knowledge of the lead audit partner and the audit team assigned to our account; the overall strength and reputation of the firm; its global capabilities relative to our business; and its knowledge of our operations. Additionally, the Audit Committee considers the impact of a change of independent registered public accounting firm. Upon consideration of these and other factors, the Audit Committee believes the appointment of Baker Tilly US, LLP ("Baker Tilly") as our independent registered public accounting firm for the fiscal year ending August 31, 2024 is in the best interests of NTIC and its stockholders. Baker Tilly has served as our independent registered public accounting firm since 2004.

Although it is not required to do so, the Board of Directors is asking our stockholders to ratify the Audit Committee's appointment of Baker Tilly as a matter of good corporate governance. If our stockholders do not ratify the appointment of Baker Tilly, another independent registered public accounting firm will be considered by the Audit Committee. Even if the appointment is ratified by our stockholders, the Audit Committee in its discretion may change the appointment at any time during the year, if it determines that such a change would be in the best interests of NTIC and our stockholders.

Representatives of Baker Tilly will be present at the Annual Meeting to respond to appropriate questions. They also will have the opportunity to make a statement if they wish to do so.

Audit, Audit-Related, Tax and Other Fees

The following table presents the aggregate fees billed to us by Baker Tilly for the fiscal years ended August 31, 2023 and August 31, 2022.

	Aggregate Amount Billed by Baker Tilly (\$)			
	Fiscal 2023		Fiscal 2022	
Audit Fees ⁽¹⁾ Audit-Related Fees ⁽²⁾	\$	493,991	\$	507,663
Tax Fees				
All Other Fees				

⁽¹⁾ These fees consisted of the audit of our annual financial statements by year, review of financial statements included in our quarterly reports on Form 10-Q and other services normally provided in connection with statutory and regulatory filings or engagements.

(2) Audit-related fees represent fees for services relating to registration statement filings.

Audit Committee Pre-Approval Policies and Procedures

All services rendered by Baker Tilly to NTIC were permissible under applicable laws and regulations and all services provided to NTIC, other than de minimis non-audit services allowed under applicable law, were approved in advance by the Audit Committee. The Audit Committee has not adopted any formal pre-approval policies and procedures.

Board Recommendation

The Board of Directors unanimously recommends that stockholders vote **FOR** ratification of the appointment of Baker Tilly as our independent registered public accounting firm for the fiscal year ending August 31, 2024.

The Board of Directors Recommends a Vote FOR Proposal Three

 \checkmark

PROPOSAL FOUR—APPROVAL OF NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION 2024 STOCK INCENTIVE PLAN

Background

On November 10, 2023, the Board of Directors, upon recommendation of the Compensation Committee, approved the Northern Technologies International Corporation 2024 Stock Incentive Plan (referred to in this section as the "2024 plan" or the "plan"), subject to approval by our stockholders at the Annual Meeting. The purpose of the 2024 plan is to advance the interests of NTIC and our stockholders by enabling us to attract and retain qualified individuals to perform services, provide incentive compensation for such individuals in a form that is linked to the growth and profitability of our company and increases in stockholder value, and provide opportunities for equity participation that align the interests of recipients with those of our stockholders.

If our stockholders approve the 2024 plan, it will replace the Northern Technologies International Corporation Amended and Restated 2019 Stock Incentive Plan (referred to as the "2019 plan"), with the remaining shares available for grant under the 2019 plan rolling over into the 2024 plan, and no new awards will be granted under the 2019 plan. The terms of the 2019 plan, as applicable, will continue to govern awards outstanding under the 2019 plan, until exercised, expired, paid or otherwise terminated or canceled. Other than the 2019 plan and our employee stock purchase plan, we have no other equity compensation plans under which equity awards can be granted.

Subject to adjustment, the maximum number of shares of our common stock to be authorized for issuance under the 2024 plan is 800,000 shares, plus (i) the number of shares of common stock remaining available for issuance under the 2019 plan but not subject to outstanding awards as of the effective date of the 2024 plan, plus (ii) the number of additional shares of common stock subject to awards outstanding under the 2019 plan as of the effective date of the 2024 plan but only to the extent that such outstanding awards are forfeited, cancelled, expire or otherwise terminate without the issuance of such shares of common stock after the effective date of the 2024 plan.

The Board of Directors is asking our stockholders to approve the 2024 plan in order to qualify stock options for treatment as incentive stock options for purposes of Section 422 of the Internal Revenue Code of 1986, as amended, or Code. In addition, the Listing Rules of the Nasdaq Stock Market require stockholder approval of the 2024 plan. If our stockholders do not approve the 2024 plan, the 2019 plan will remain in effect until it terminates in accordance with its terms.

The 2024 plan allows us to award eligible recipients the following awards:

- options to purchase shares of our common stock that qualify as "incentive stock options" within the meaning of Section 422 of the Code (referred to as "incentive options");
- options to purchase shares of our common stock that do not qualify as incentive options (referred to as "non-statutory options");
- rights to receive a payment from us, in the form of shares of our common stock, cash or a combination of both, equal to the difference between the fair market value of one or more shares of our common stock and a specified exercise price of such shares (referred to as "stock appreciation rights" or "SARs");
- shares of our common stock that are subject to certain forfeiture and transferability restrictions (referred to as "restricted stock awards");

- rights to receive shares of common stock (or the equivalent value in cash or other property) at a future time (referred to as "deferred stock units" or "DSUs");
- rights to receive the fair market value of one or more shares of our common stock, payable in cash, shares of our common stock, or a combination of both, the payment, issuance, retention and/or vesting of which is subject to the satisfaction of specified conditions, which may include achievement of specified objectives (referred to as "restricted stock unit awards" or "RSUs");
- rights to receive an amount of cash, a number of shares of our common stock, or a combination of both, contingent upon achievement of specified objectives during a specified period (referred to as "performance awards"); and
- other stock-based awards.

In the following discussion, we refer to both incentive options and non-statutory options as "options," and to options, stock appreciation rights, restricted stock awards, deferred stock units, restricted stock units, performance awards and other stock based awards as "incentive awards."

Reasons Why You Should Vote in Favor of the 2024 Plan

The Board of Directors recommends a vote "FOR" the approval of the 2024 plan because the Board of Directors believes the proposed 2024 plan is in the best interests of NTIC and its stockholders for the following reasons:

- Aligns directors, employee and stockholder interests. We currently provide long-term incentives in the form of stock option grants to our non-employee directors, executive officers and other key employees. We believe that our stock-based compensation program helps align the interests of our directors, executive officers and other key employees with our stockholders. We believe that our long-term stock-based incentives help promote long-term retention of our employees and encourage ownership of our common stock. If the 2024 plan is approved, we will be able to maintain our means of aligning the interests of our directors, executive officers and other key employees with the interests of our stockholders.
- *Attracts and retains talent*. Talented, motivated and effective directors, executives and employees are essential to executing our business strategies. Stock-based and annual cash incentive compensation has been an important component of total compensation at NTIC for many years because such compensation enables us to effectively recruit executives and other employees while encouraging them to act and think like owners of NTIC. If the 2024 plan is approved, we believe we will maintain our ability to offer competitive compensation packages to both retain our best performers and attract new talent.
- Supports our pay-for-performance philosophy. We believe that stock-based compensation, by its very nature, is performance-based compensation. We use incentive compensation to help reinforce desired financial and other business results to our executives and to motivate them to make decisions to produce those results.
- Protects stockholder interests and embraces sound stock-based compensation practices. As described in more detail below under "Summary of Sound Governance Features of the 2024 *Plan*," the 2024 plan includes a number of features that are consistent with the interests of our stockholders and sound corporate governance practices.

Summary of Sound Governance Features of the 2024 Plan

The Board of Directors and Compensation Committee believe that the 2024 plan contains several features that are consistent with the interests of our stockholders and sound corporate governance practices, including the following:

- ✓ No automatic share replenishment or "evergreen" provision
- ✓ Will not be excessively dilutive to our stockholders
- ✓ Limit on number of "full value" awards
- ✓ No liberal share counting or "recycling" of shares from exercised stock options, SARs or other stock-based awards
- ✓ No reload stock options or SARs
- ✓ No re-pricing of "underwater" stock options or SARs without stockholder approval
- ✓ Members of the committee administering the plan are non-employee and independent directors
 ✓ Stockholder approval is required for material
- revisions to the 2024 plan
- ✓ No "tax gross-ups"
- ✓ Options, SARs and unvested performance awards are not entitled to dividend equivalent rights and no dividends will be paid on unvested awards
- ✓ Limits on non-employee director compensation
- ✓ Stock option and SAR exercise prices will not be lower than the fair market value on the grant date

✓ "Clawback" provisions

Background for Shares Authorized for Issuance

If the 2024 plan is approved, the maximum number of shares of common stock available for issuance under the 2024 plan will be 800,000 shares, plus the number of shares of common stock remaining available for issuance under the 2019 plan but not subject to outstanding awards as of the effective date of the 2024 plan, plus the number of additional shares of common stock subject to awards outstanding under the 2019 plan as of the effective date of the 2024 plan but only to the extent that such outstanding awards are forfeited, cancelled, expire or otherwise terminate without the issuance of such shares of common stock after the effective date of the 2024 plan. As of November 21, 2023, 1,387,415 shares of common stock were subject to outstanding awards under the 2019 plan, and 157,059 shares of common stock remained available for issuance under the 2019 plan.

In determining the number of shares of common stock available under the 2024 plan, the Board of Directors and Compensation Committee considered a number of factors, which are discussed further below, including:

- Shares currently available under the 2019 plan and total outstanding equity-based awards and how long the shares available are expected to last;
- Historical equity award granting practices, including our three-year average share usage rate (commonly referred to as "burn rate"); and
- Potential dilution.

Shares Available and Outstanding Equity Awards

While the use of long-term incentives, in the form of equity awards, is an important part of our compensation program, we are mindful of our responsibility to our stockholders to exercise judgment in the granting of equity awards. In setting the number of shares of common stock available for issuance under the 2024 plan, the Board of Directors and Compensation Committee also considered shares currently available under the 2019 plan and total outstanding equity awards and how long the shares available under the 2019 plan are expected to last. To facilitate approval of the 2024 plan, set forth below

is certain information about our shares of common stock that may be issued under our equity compensation plans as of November 21, 2023.

As of November 21, 2023,

- we had 9,427,599 shares of common stock issued and outstanding. The market value of one share of common stock on November 21, 2023, as determined by reference to the closing price as reported on the Nasdaq Global Market, was \$11.21;
- 1,387,415 shares were subject to outstanding stock options under the 2019 plan and 439,560 shares were subject to outstanding stock options under the prior equity compensation plan; and
- 157,059 shares remained available for issuance under the 2019 plan.

Historical Equity Award Granting Practices

In setting the number of shares of common stock authorized for issuance under the 2024 plan, the Board of Directors and Compensation Committee also considered the historical number of equity awards granted under the 2019 plan in each of the last three fiscal years. The following table sets forth information regarding awards granted and earned and the annual burn rate for each of the last three fiscal years. The only equity awards granted during the last three fiscal years are stock options.

	Fiscal 2023	Fiscal 2022	Fiscal 2021
Stock options granted	277,613	174,840	419,874
Weighted average basic common shares outstanding			
during fiscal year	9,693,482	9,216,216	9,116,472
Burn rate	3.1%	1.9%	4.6%

The Board of Directors and Compensation Committee also considered our three-year average burn rate (fiscal 2021 to fiscal 2023) of approximately 3.1%, which is lower than the industry thresholds established by certain major proxy advisory firms.

Based on historical and anticipated granting practices and the recent trading price of our common stock, we expect the additional shares authorized for issuance by the 2024 plan to cover awards for approximately three to four years. However, we cannot predict our future equity grant practices, the future price of our shares, or future hiring activity with any degree of certainty at this time, and the shares available for issuance under the 2024 plan could last for a shorter or longer time.

Potential Dilution

In setting the number of shares of common stock authorized for issuance under the 2024 plan, the Board of Directors and Compensation Committee also considered the potential dilution (often referred to as overhang) that would result by approval of the 2024 plan, including the policies of certain institutional investors and major proxy advisory firms. Potential dilution, or overhang, is as set forth in the table below, as of November 21, 2023, assuming approval of the 2024 plan. The 957,059 shares that would be available under the 2024 plan would represent 29.5% of our fully diluted shares of common stock assuming the 2024 plan is approved, as described in the table below.

	Assuming Approval of 2024 Plan
Options Outstanding as of November 21, 2023	1,826,975
Weighted Average Exercise Price of Options Outstanding	\$ 11.40

	Assuming Approval of 2024 Plan
Weighted Average Remaining Term of Options Outstanding	6.57 years
Total Equity Awards Outstanding ⁽¹⁾	1,826,975
Common Stock Outstanding as of November 21, 2023	9,427,599
Current Dilution as of November 21, 2023 ⁽²⁾	19.4%
Shares Available for Grant under the 2019 Plan (will carry over to 2024 plan)	157,059
Current Potential Dilution, or Overhang, Under the 2019 Plan, as a Percentage of Common Stock Outstanding as of November 21, 2023 ⁽³⁾	21.0%
Shares Available for Future Grant Under the 2024 Plan (not including carryover	
shares)	800,000
Potential Dilution, or Overhang, Under the 2024 Plan, as a Percentage of Common Stock Outstanding as of November 21, 2023 ⁽⁴⁾	29.5%

- (1) The only equity awards outstanding are stock options. No restricted stock, restricted stock units, performance stock units or other equity awards are outstanding.
- (2) Dilution consists of the number of shares subject to equity awards outstanding as of November 21, 2023 divided by the number of shares of common stock outstanding as of November 21, 2023.
- (3) Current potential dilution, or overhang, under the 2019 plan consists of the number of shares subject to equity awards outstanding as of November 21, 2023 and the number of shares available for future grant under the 2019 plan divided by the number of shares of common stock outstanding as of November 21, 2023.
- (4) Current potential dilution, or overhang, under the 2024 Plan consists of the number of shares subject to equity awards outstanding as of November 21, 2023 and the number of shares available for future grant under the 2024 Plan, including the carryover shares, divided by the number of shares of common stock outstanding as of November 21, 2023.

Summary of the 2024 Plan Features

The major features of the 2024 plan are summarized below. The summary is qualified in its entirety by reference to the full text of the 2024 plan, a copy of which may be obtained from us. A copy of the 2024 plan also has been filed electronically with the Securities and Exchange Commission, or SEC, as an appendix to this proxy statement, and is available through the SEC's website at *www.sec.gov*.

Purpose. The purpose of the 2024 plan is to advance the interests of NTIC and its stockholders by enabling us to attract and retain qualified individuals through opportunities for equity participation in NTIC and to reward those individuals who contribute to the achievement of our economic objectives.

Eligibility. All employees (including officers and directors who are also employees), non-employee directors, consultants, advisors and independent contractors of NTIC or any subsidiary will be eligible to receive incentive awards under the 2024 plan. As of November 21, 2023, there were approximately 90 persons who would be eligible to receive awards under the 2024 plan. Although not necessarily indicative of future grants under the 2024 plan, 15 employees, or approximately 16% of the approximately 90 eligible recipients, have been granted awards under the 2019 plan.

Shares Available for Issuance. The maximum number of shares of our common stock available for issuance under the 2024 plan will be 800,000 shares plus the number of shares of common stock remaining available for issuance under the 2019 plan but not subject to outstanding awards as of the effective date of the 2024 plan, plus the number of additional shares of common stock subject to awards outstanding under the 2019 plan as of the effective date of 2024 plan but only to the extent that such

outstanding awards are forfeited, cancelled, expire or otherwise terminate without the issuance of such shares of common stock after the effective date of the 2019 plan.

Shares of our common stock that are issued under the 2024 plan or that are potentially issuable pursuant to outstanding incentive awards reduce the number of shares remaining available. All shares so subtracted from the amount available under the plan with respect to an incentive award that lapses, expires, is forfeited or for any reason is terminated, unexercised or unvested and any shares of our common stock that are subject to an incentive award that is settled or paid in cash or any other form other than shares of our common stock will automatically again become available for issuance under the 2024 plan. However, any shares not issued due to the exercise of an option by a "net exercise" or the tender or attestation as to ownership of previously acquired shares (as described below), as well as shares covered by a stock-settled stock appreciation right and shares withheld by us to satisfy any tax withholding obligations will not again become available for issuance under the 2024 plan. Any shares of our common stock that we repurchase on the open market using the proceeds from the exercise of an award under the 2024 plan will not increase the number of shares available for future grants of awards under the 2024 plan.

Non-Employee Director Compensation Limit. The 2024 plan provides that the sum of any cash compensation, or other compensation, and the value (determined as of the grant date in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 718, or any successor thereto) of awards granted to a non-employee director as compensation for services as a non-employee director during any fiscal year of NTIC may not exceed \$300,000 (increased to \$400,000 with respect to any non-employee director serving as chair of the Board of Directors or lead independent director or in the fiscal year of a non-employee director's initial service as a non-employee director). Any compensation that is deferred will count towards this limit for the year in which the compensation is first earned, and not a later year of settlement.

Grant Limits. Under the terms of the 2024 plan:

- no more than 800,000 shares of our common stock may be issued pursuant to the exercise of incentive stock options; and
- no more than 200,000 shares of our common stock may be issued or issuable in connection with full-value awards.

All of the share limitations in the 2024 plan may be adjusted to reflect changes in our corporate structure or shares, as described below. In addition, the number of shares that may be issued as incentive options or other incentive awards will not apply to certain incentive awards granted upon our assumption or substitution of like awards in any acquisition, merger or consolidation.

Adjustments. In the event of any reorganization, merger, consolidation, recapitalization, liquidation, reclassification, stock dividend, stock split, combination of shares, rights offering, divestiture or extraordinary dividend (including a spin-off) or any other similar change in our corporate structure or shares of common stock, we must adjust or substitute:

- the number and kind of securities available for issuance under the 2024 plan, including the sublimits described above; and
- in order to prevent dilution or enlargement of the rights of participants, the number, kind and, where applicable, the exercise price of securities subject to outstanding incentive awards.

Administration. The 2024 plan is administered by our Board of Directors or by a committee of the Board. Any such committee will consist of at least two members of the Board, all of whom are "non-employee directors" within the meaning of Rule 16b-3 under the Exchange Act, and all of whom are "independent" as required by the listing standards of the Nasdaq Stock Market. We expect both the Board of Directors and the Compensation Committee of the Board of Directors to administer the 2024 plan. The Board of Directors or the committee administering the 2024 plan is referred to as the "committee." The committee may delegate its duties, power and authority under the 2024 plan to any of our officers to the extent consistent with applicable Delaware corporate law, except with respect to participants subject to Section 16 of the Exchange Act.

The committee has the authority to determine all provisions of incentive awards consistent with terms of the 2024 plan, including, the eligible recipients who will be granted one or more incentive awards under the 2024 plan, the nature, extent and terms of the incentive awards to be made to each participant and the form of an incentive award agreement, the time or times when incentive awards will be granted, the duration of each incentive award, and the restrictions and other conditions to which the payment or vesting of incentive awards may be subject. The committee has the authority to pay the economic value of any incentive award or settle any incentive award in the form of cash, our common stock or any combination of both, construe and interpret the 2024 plan and incentive awards, determine fair market value of NTIC common stock, determine whether incentive awards will be adjusted for dividend equivalents and may amend or modify the terms of outstanding incentive awards (except for any prohibited "re-pricing" of options, discussed below) so long as the amended or modified terms are permitted under the 2024 plan and any adversely affected participant has consented to the amendment or modification.

In the event of any reorganization, merger, consolidation, recapitalization, liquidation, reclassification, stock dividend, stock split, combination of shares, rights offering, extraordinary dividend or divestiture (including a spin off) or any other similar change in corporate structure or shares; any purchase, acquisition, sale, disposition or write-down of a significant amount of assets or a significant business; any change in accounting principles or practices, tax laws or other such laws or provisions affecting reported results; any uninsured catastrophic losses or extraordinary non-recurring items as described in management's discussion and analysis of financial performance appearing in our annual report to stockholders for the applicable year; or any other similar change, in each case with respect to NTIC or any other entity whose performance is relevant to the grant or vesting of an incentive award, the committee (or, if NTIC is not the surviving corporation in any such transaction, the board of directors of the surviving corporation) may, without the consent of any affected participant, amend or modify the vesting criteria (including performance criteria) of any outstanding incentive award that is based in whole or in part on the financial performance of NTIC (or any subsidiary or division or other subunit thereof) or such other entity so as equitably to reflect such event, with the desired result that the criteria for evaluating such financial performance of NTIC or such other entity will be substantially the same (in the sole discretion of the committee or the board of directors of the surviving corporation) following such event as prior to such event; provided, however, that the amended or modified terms are permitted by the 2024 plan as then in effect.

The committee may, in its sole discretion, amend the terms of the 2024 plan or incentive awards with respect to participants resident outside of the United States or employed by a non-U.S. subsidiary in order to comply with local legal requirements, to otherwise protect our or subsidiary's interests, or to meet objectives of the 2024 plan, and may, where appropriate, establish one or more sub-plans for the purposes of qualifying for preferred tax treatment under foreign tax laws. This authority does not, however, permit the committee to take any action:

• to reserve shares or grant incentive awards in excess of the limitations provided in the 2024 plan;

- to effect any re-pricing of options, as discussed below;
- to grant options or stock appreciation rights having an exercise price or grant price less than 100% of the "fair market value" (as defined below) of one share of our common stock on the date of grant; or
- for which stockholder approval would then be required pursuant to Section 422 of the Code or the Listing Rules of the Nasdaq Stock Market or other applicable market or exchange.

Except in connection with certain specified changes in our corporate structure or shares, the committee may not, without prior approval of our stockholders, seek to effect any re-pricing of any previously granted, "underwater" option or stock appreciation right by:

- amending or modifying the terms of the underwater option or stock appreciation right to lower the exercise price or grant price;
- canceling the underwater option or stock appreciation right in exchange for cash, replacement options or stock appreciation rights having a lower exercise price or grant price, or other incentive awards;
- repurchasing the underwater options and stock appreciation rights and granting new incentive awards under the 2024 plan; or
- re-pricing within the meaning of the applicable accounting standard.

For purposes of the 2024 plan, an option or stock appreciation right is deemed to be "underwater" at any time when the fair market value of our common stock is less than the exercise price or grant price.

Options. The exercise price to be paid by a participant at the time an option is exercised may not be less than 100% of the fair market value of one share of our common stock on the date of grant (or 110% of the fair market value of one share of our common stock on the date of grant of an incentive option if the participant owns, directly or indirectly, more than 10% of the total combined voting power of all classes of stock of NTIC or any parent or subsidiary). However, in the event options are granted as a result of our assumption or substitution of options in a merger or acquisition, the exercise price will be the price determined by the committee pursuant to the conversion terms applicable to the transaction. At any time while our common stock is listed on the Nasdaq Stock Market, "fair market value" under the 2024 plan means the mean between the reported high and low sale price of a share at the end of the regular trading session as reported by the Nasdaq Global Market as of the date in question (or, if no shares were traded on such date, the next preceding day on which there was such a trade). As of November 21, 2023, the closing sale price of a share of our common stock on the Nasdaq Global Market was \$11.21.

The total purchase price of the shares of common stock to be purchased upon exercise of an option will be paid entirely in cash; provided, however, that the committee may allow exercise payments to be made, in whole or in part, by delivery of a broker exercise notice (pursuant to which a broker or dealer is irrevocably instructed to sell enough shares or loan the optionee enough money to pay the exercise price and to remit such sums to us), by tender, either by actual delivery or attestation as to ownership, of previously acquired shares of our common stock that are acceptable to the committee, by a "net exercise" of the option, by a combination of such methods or by any other method approved or accepted by the committee. In the case of a "net exercise" of an option, we will not require a payment of the exercise price of the option from the participant but will reduce the number of shares of our common stock issued upon the exercise by the largest number of whole shares having a fair market value that does not exceed the aggregate exercise price for the shares exercised. Any shares of our common stock tendered or covered by an attestation will be valued at their fair market value on the exercise date of the option.

Options may be exercised in whole or in installments, as determined by the committee, and the committee may impose conditions or restrictions to the exercisability of an option, including that the participant remain continuously employed by us for a certain period or that the participant or us (or any subsidiary, division or other subunit of NTIC) satisfy certain specified objectives. An option may not become exercisable, nor remain exercisable after 10 years from its date of grant (five years from its date of grant in the case of an incentive option if the participant owns, directly or indirectly, more than 10% of the total combined voting power of all classes of stock of NTIC or any parent or subsidiary).

Options may, but need not, include a provision whereby the participant may elect at any time before the participant's employment or service terminates to exercise the option as to any part or all of the shares subject to the option prior to the full vesting of the option. Any unvested shares so purchased will be subject to a repurchase option in favor of us and to any other restriction the committee determines to be appropriate.

Stock Appreciation Rights. A stock appreciation right is the right to receive a payment from us, in the form of shares of our common stock, cash or a combination of both, equal to the difference between the fair market value of one or more shares of our common stock and a specified exercise price of such shares. Stock appreciation rights will be subject to such terms and conditions, if any, consistent with the other provisions of the plan, as may be determined by the committee. The committee will have the sole discretion to determine the form in which payment of the economic value of stock appreciation rights will be made to a participant (i.e., cash, our common stock or any combination thereof) or to consent to or disapprove the election by a participant of the form of such payment.

The grant price of a stock appreciation right will be determined by the committee, in its discretion, at the date of grant but may not be less than 100% of the fair market value of one share of our common stock on the date of grant, except as provided below in connection with certain "tandem" grants (as further defined below). However, in the event that stock appreciation rights are granted as a result of our assumption or substitution of stock appreciation rights in a merger or acquisition, the grant price will be the price determined by the committee pursuant to the conversion terms applicable to the transaction.

A stock appreciation right will become exercisable at such times and in such installments as may be determined by the committee in its sole discretion at the time of grant; provided, however, that no stock appreciation right may be exercisable after 10 years from its date of grant.

Stock appreciation rights may be granted alone or in addition to other incentive awards, or in tandem with an option, either at the time of grant of the option or at any time thereafter during the term of the option. A stock appreciation right granted in tandem with an option shall cover the same number of shares of our common stock as covered by the option (or such lesser number as the committee may determine), shall be exercisable at such time or times and only to the extent that the related option is exercisable, have the same term as the option and will have a grant price equal to the exercise price for the option. Upon the exercise of a stock appreciation right granted in tandem with an option, the option shall be canceled automatically to the extent of the number of shares covered by such exercise; conversely, upon exercise of an option having a related stock appreciation right, the stock appreciation right will be canceled automatically to the extent of the number of shares covered by the option exercise.

Restricted Stock Awards, Restricted Stock Units and Deferred Stock Units. A restricted stock award, restricted stock units and deferred stock units are awards of our common stock that vest at such times and in such installments as may be determined by the committee and, until the incentive award vest, is subject to restrictions on transferability and the possibility of forfeiture. The committee may impose such restrictions or conditions to the vesting of restricted stock awards, restricted stock units or deferred stock units, as it deems appropriate, including that the participant remain continuously employed by us for a

certain period and/or that the participant or us (or any subsidiary, division or other subunit of NTIC) satisfy specified objectives. To enforce the restrictions, the committee may place a legend on the stock certificates or book-entry notations representing restricted stock awards referring to such restrictions and may take other steps to enforce the restrictions. Restricted stock units and deferred stock units are similar to restricted stock awards except that no shares of our common stock are actually awarded on the grant date of the restricted stock unit or deferred stock unit, respectively, and are denominated in shares of our common stock but paid in cash, shares of our common stock or a combination of cash and shares of our common stock.

Unless the committee determines otherwise, any dividends (including regular quarterly cash dividends) or distributions paid with respect to shares of our common stock subject to the unvested portion of a restricted stock award will be subject to the same restrictions as the shares to which such dividends or distributions relate.

In the committee's discretion, any restricted stock units and deferred stock units awarded under the 2024 plan may carry with it a right to dividend equivalents. Such right would entitle the participant to be credited with an amount equal to all cash dividends paid on one share of our common stock while the restricted stock unit or deferred stock unit is outstanding. Dividend equivalents may be converted into additional restricted stock units or deferred stock units and may be made subject to the same conditions and restrictions as the restricted stock units or deferred stock units to which they attach. Settlement of dividend equivalents may be made in the form of cash, in the form of shares of our common stock, or in a combination of both. Dividend equivalents as to restricted stock units or deferred stock units will be subject to forfeiture and termination to the same extent as the corresponding restricted stock units or deferred stock units as to which the dividend equivalents relate. In no event will participants holding restricted stock units receive any dividend equivalents on such restricted stock units until the vesting provisions of such restricted stock units lapse. Additionally, unless the 2024 plan provides otherwise, a participant will have all voting, liquidation and other rights with respect to shares of our common stock issued to the participant as a restricted stock award upon the participant becoming the holder of record of such shares as if the participant were a holder of record of shares of our unrestricted common stock. A participant will have no voting rights to any restricted stock units or deferred stock units granted under the 2024 plan.

Performance Award. A participant may be granted one or more performance awards under the 2024 plan, and such performance awards will be subject to such terms and conditions, if any, consistent with the other provisions of the 2024 plan, as may be determined by the committee in its sole discretion, including, but not limited to, the achievement of one or more specified objectives; provided, however, that in all cases payment of the performance award will be made within two and one-half months following the end of the tax year during which receipt of the performance award is no longer subject to a "substantial risk of forfeiture" within the meaning of Section 409A of the Code, except upon certain conditions.

Performance Criteria. The committee may grant incentive awards contingent upon achievement of performance goals, including the following, without limitation: net sales; operating income; income before income taxes; income before interest, taxes, depreciation and amortization; income before income taxes; income before interest, taxes, depreciation and amortization; income before income; net income per share (basic or diluted); profitability as measured by return ratios (including return on assets, return on equity, return on capital, return on investment and return on sales); cash flows; market share; cost of sales; sales, general and administrative expense, cost reduction goals; margins (including one or more of gross, operating and net income margins); stock price; total return to stockholders; economic value added; working capital and strategic plan development and implementation. The committee may select one criterion or multiple criteria for measuring performance, and the measurement may be based on NTIC, any NTIC subsidiary or NTIC's business unit performance, either absolute or by

relative comparison to prior periods or other companies or any other external measure of the selected criteria.

Other Stock-Based Awards. A recipient may be granted one or more other stock-based awards under the 2024 plan, and such other-stock based awards will be subject to such terms and conditions, consistent with the other provisions of the 2024 plan, as may be determined by the committee in its sole discretion in such amounts and subject to such terms and conditions as the committee will determine. Such other stock-based awards may involve the transfer of actual shares of our common stock to participants as a bonus or in lieu of obligations to pay cash or deliver other property under the 2024 plan or under other plans or compensatory arrangements, or payment in cash or otherwise of amounts based on the value of shares of our common stock.

Change in Control. In the event a "change in control" of NTIC occurs, then, if approved by the committee in its sole discretion either at the time of the grant of the incentive award or at any time after such grant, all options and stock appreciation rights will become immediately exercisable in full and will remain exercisable for the remainder of their terms; all outstanding restricted stock awards will become immediately fully vested and non-forfeitable; and any conditions to the payment of restricted stock units, deferred stock units, performance awards and other stock-based awards will lapse.

In addition, the committee in its sole discretion may determine that some or all participants holding outstanding incentive awards, whether or not exercisable or vested, will be canceled and terminated and what the participant will receive for each share of our common stock subject to such incentive award a cash payment (or the delivery of shares of stock, other securities or a combination of cash, stock and securities with a fair market value) equal to the difference, if any, between the consideration received by our stockholders in respect of a share of common stock in connection with such change in control and the purchase price per share, if any, under the incentive award, multiplied by the number of shares of our common stock subject to such incentive award; provided, however, that if such product is zero (\$0) or less or to the extent that the incentive award is not then exercisable, the incentive award may be canceled and terminated without payment therefor.

For purposes of the 2024 plan a "change in control" of NTIC occurs upon:

- the sale, lease, exchange or other transfer of substantially all of the assets of NTIC (in one transaction or in a series of related transaction) to a person or entity that is not controlled, directly or indirectly, by NTIC;
- a merger or consolidation to which NTIC is a party if our stockholders immediately prior to effective date of such merger or consolidation do not have "beneficial ownership" (as defined in Rule 13d-3 under the Exchange Act) immediately following the effective date of such merger or consolidation of more than 80% of the combined voting power of the surviving corporation's outstanding securities ordinarily having the right to vote at elections of directors; or
- a change in control of NTIC of a nature that would be required to be reported pursuant to Section 13 or 15(d) of the Exchange Act, whether or not NTIC is then subject to such reporting requirements, including, without limitation, such time as (i) any person becomes, after the effective date of the 2024 plan, the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of 40% or more of the combined voting power of our outstanding securities ordinarily having the right to vote at elections of directors, or (ii) individuals who constitute the Board of Directors on the effective date of the 2024 plan cease for any reason to constitute at least a majority of the Board of Directors, provided that any person becoming a director subsequent to the effective date of the 2024 plan whose election, or nomination for election by our stockholders, was approved by a vote of at least a majority of the

directors comprising the Board of Directors on the effective date of the 2024 plan will, for purposes of this clause (ii), be considered as though such persons were a member of the Board of Directors on the effective date of the 2024 plan.

Effect of Termination of Employment or Other Services. If a participant ceases to be employed by, or perform other services for, us, all incentive awards held by the participant will be treated as set forth below unless otherwise expressly provided by the committee in its sole discretion in an incentive award agreement of the terms of an individual agreement or modified by the committee in its discretion as set forth below. Upon termination due to death, disability or retirement, all outstanding, exercisable options and stock appreciation rights then held by the participant will remain exercisable for a period of 12 months thereafter (but in no event after the expiration date of any such option or stock appreciation rights), and all unvested restricted stock awards, all outstanding but unpaid and unvested restricted stock units, deferred stock units, performance awards and other stock based awards then held by the participant will be terminated and forfeited. Upon termination for a reason, other than death, disability or retirement, which is not also for "cause" (as defined in the 2024 plan), all outstanding options and stock appreciation rights then held by the participant will, to the extent exercisable as of such termination, remain exercisable in full for a period of three months after such termination (but in no event after the expiration date of any such option or stock appreciation right). Also, upon such termination all options and stock appreciation rights that are not exercisable; all unvested restricted stock awards; and all outstanding but unpaid and unvested restricted stock units, deferred stock units, performance awards and other stock based awards then held by the participant will be terminated and forfeited.

The committee may at any time (including on or after the date of grant or following termination), in connection with a participant's termination, cause options or stock appreciation rights held by the participant to terminate, become or continue to become exercisable and/or remain exercisable, and restricted stock awards, restricted stock units, deferred stock units performance awards or other stock based awards then held by the participant as of the effective date of such termination to terminate, vest and/or continue to vest or become free of restrictions and conditions to payment, as the case may be.

Forfeiture and Recoupment. If a participant is determined by the committee to have taken any action that would constitute "cause" or an "adverse action" during or within one year after the termination of the participant's employment or other service with NTIC or a subsidiary, all rights of the participant under the 2024 plan and any agreements evidencing an award then held by the participant will terminate and be forfeited and the committee may require the participant to surrender and return to us any shares received, and/or to disgorge any profits or any other economic value made or realized by the participant in connection with any awards or any shares issued upon the exercise or vesting of any awards during or within one year after the termination of the participant's employment or other service. Additionally, as applicable, we may defer the exercise of any option or stock appreciation right for a period of up to six months after receipt of a participant's written notice of exercise or the issuance of share certificates upon the vesting of any incentive award for a period of up to six months after the date of such vesting in order for the committee to make any determination as to the existence of cause or an adverse action.

"Cause," with respect to any participant, unless otherwise stated in a participant's employment or other service agreement, means (i) dishonesty, fraud, misrepresentation, embezzlement or other act of dishonesty with respect to NTIC or any subsidiary, (ii) any unlawful or criminal activity of a serious nature, (iii) any intentional and deliberate breach of a duty or duties that, individually or in the aggregate, are material in relation to the participant's overall duties, or (iv) any material breach by a participant of any employment, service, confidentiality or non-compete agreement entered into with us or any of our subsidiaries.

An "adverse action" includes any of the following actions or conduct that the committee determines to be injurious, detrimental, prejudicial or adverse to our interests: (i) disclosing any confidential information of NTIC or any subsidiary to any person not authorized to receive it; (ii) engaging, directly or indirectly, in any commercial activity that in the judgment of the committee competes with our business or the business of any of our subsidiaries; or (iii) interfering with our relationships or the relationships of our subsidiaries and our and their respective employees, independent contractors, customers, prospective customers and vendors.

In addition, subject to the terms of an incentive award agreement, incentive awards under the 2024 plan are subject to any automatic forfeiture or voluntary compensation "clawback," forfeiture or recoupment provisions under applicable law and any compensation "clawback," forfeiture or recoupment policy of NTIC, as in effect from time to time, and such forfeiture and/or penalty conditions or provisions as determined by the committee and set forth in the applicable incentive award agreement, including without limitation the Northern Technologies International Corporation Clawback Policy effective as of October 2, 2023.

Dividend Rights. In the committee's discretion, certain incentive awards (including any award that has been deferred) may carry with it a right to dividend equivalents. Such right would entitle the participant to be credited with an amount equal to all cash dividends paid on one share of our common stock while the incentive award is outstanding. Dividend equivalents may be converted into additional restricted stock units or other incentive awards and may be made subject to the same conditions and restricted as the restricted stock units, deferred stock units or other incentive awards to which they attach. Settlement of dividend equivalents may be made in the form of cash, in the form of shares of our common stock, or in a combination of both. Dividend equivalents as to restricted stock units, deferred stock units or other incentive awards will be subject to forfeiture and termination to the same extent as the corresponding incentive awards as to which the dividend equivalents relate. In no event will dividends be paid out on any incentive awards until they are vested or provided with performance awards.

Term: Termination; Amendments. Unless terminated earlier, the 2024 plan will terminate at 11:59 p.m., central time, on January 18, 2034. Incentive awards outstanding at the time the 2024 plan is terminated will remain outstanding in accordance with their applicable terms and conditions and the terms and conditions of the 2024 plan. The Board may suspend or terminate the 2024 plan or any portion of the plan at any time. In addition to the committee's authority to amend the 2024 plan with respect to participants resident outside of the United States or employed by a non-U.S. subsidiary, the Board may amend the 2024 plan from time to time in order that incentive awards under the 2024 plan will conform to any change in applicable laws or regulations or in any other respect that the Board may deem to be in our best interests; provided, however, that no amendments to the 2024 plan will be effective without stockholder approval, if it is required under Section 422 of the Code or the Listing Rules of the Nasdaq Stock Market, or if the amendment seeks to increase the number of shares reserved for issuance under the 2024 plan (other than as a result of a permitted adjustment upon certain corporate events, such as stock splits) or to modify the prohibitions on underwater option re-pricing discussed above. Termination, suspension or amendment of the 2024 plan will not adversely affect any outstanding incentive award without the consent of the affected participant, except for adjustments in the event of changes in our capitalization or a "change in control" of NTIC.

Transferability. In general, no right or interest in any incentive award may be assigned or transferred by a participant, except by will or the laws of descent and distribution, or subjected to any lien or otherwise encumbered. However, a participant is entitled to designate a beneficiary to receive an incentive award on such participant's death, and in the event of such participant's death, payment of any amounts due under the 2024 plan will be made to, and exercise of any options or stock appreciation rights may be made by, such beneficiary. Additionally, upon a participant's request, the committee may permit a

participant to transfer all or a portion of a non-statutory option, other than for value, to certain of the participant's family members or related family trusts, foundations or partnerships. Permitted transferees of non-statutory options will remain subject to all the terms and conditions of the incentive award applicable to the participant.

U.S. Federal Income Tax Consequences

The following is a general summary, as of the date of this proxy statement, of the U.S. federal income tax consequences to participants and NTIC of transactions under the 2024 plan. This summary is intended for the information of stockholders considering how to vote at the Annual Meeting and not as tax guidance to participants in the 2024 plan, as the consequences may vary with the types of grants made, the identity of the participant, and the method of payment or settlement. The summary does not address the effects of other U.S. federal taxes or taxes imposed under state, local, or foreign tax laws. Participants are encouraged to seek the advice of a qualified tax advisor regarding the tax consequences of participation in the 2024 plan.

Incentive Stock Options. With respect to incentive stock options, generally, the participant is not taxed, and we are not entitled to a deduction, on either the grant or the exercise of an incentive stock option so long as the requirements of Section 422 of the Code continue to be met. If the participant meets the employment requirements and does not dispose of the shares of our common stock acquired upon exercise of an incentive stock option until at least one year after date of the exercise of the stock option and at least two years after the date the stock option was granted, gain or loss realized on sale of the shares will be treated as long-term capital gain or loss. If the shares of our common stock are disposed of before those periods expire, which is called a disqualifying disposition, the participant will be required to recognize ordinary income in an amount equal to the lesser of (i) the excess, if any, of the fair market value of our common stock on the date of exercise over the exercise price, or (ii) if the disposition is a taxable sale or exchange, the amount of gain realized. Upon a disqualifying disposition, we will generally be entitled, in the same tax year, to a deduction equal to the amount of ordinary income recognized by the participant, assuming that a deduction is allowed under Section 162(m) of the Code.

Non-Statutory Stock Options. The grant of a stock option that does not qualify for treatment as an incentive stock option, which is generally referred to as a non-statutory stock option, is generally not a taxable event for the participant. Upon exercise of the stock option, the participant will generally be required to recognize ordinary income in an amount equal to the excess of the fair market value of our common stock acquired upon exercise (determined as of the date of exercise) over the exercise price of the stock option, and we will be entitled to a deduction in an equal amount in the same tax year, assuming that a deduction is allowed under Section 162(m) of the Code. At the time of a subsequent sale or disposition of shares obtained upon exercise of a non-statutory stock option, any gain or loss will be a capital gain or loss, which will be either a long-term or short-term capital gain or loss, depending on how long the shares have been held.

SARs. The grant of a SAR will not cause the participant to recognize ordinary income or entitle us to a deduction for federal income tax purposes. Upon the exercise of a SAR, the participant will recognize ordinary income in the amount of the cash or the value of shares payable to the participant (before reduction for any withholding taxes), and we will receive a corresponding deduction in an amount equal to the ordinary income recognized by the participant, assuming that a deduction is allowed under Section 162(m) of the Code.

Restricted Stock Awards, RSUs, DSUs and Other Stock-Based Awards. The federal income tax consequences with respect to restricted stock awards, RSUs, DSUs, performance awards, and other stock-based awards depend on the facts and circumstances of each award, including, in particular, the nature of

any restrictions imposed with respect to the awards. In general, if an award of stock granted to the participant is subject to a "substantial risk of forfeiture" (e.g., the award is conditioned upon the future performance of substantial services by the participant) and is nontransferable, a taxable event occurs when the risk of forfeiture ceases or the awards become transferable, whichever first occurs. At such time, the participant will recognize ordinary income to the extent of the excess of the fair market value of the stock on such date over the participant's cost for such stock (if any), and the same amount is deductible by us, assuming that a deduction is allowed under Section 162(m) of the Code. Under certain circumstances, the participant, by making an election under Section 83(b) of the Code, can accelerate federal income tax recognition with respect to an award of stock that is subject to a substantial risk of forfeiture and transferability restrictions, in which event the ordinary income amount and our deduction, assuming that a deduction is allowed under Section 162(m) of the Code, will be measured and timed as of the grant date of the award. If the stock award granted to the participant is not subject to a substantial risk of forfeiture or transferability restrictions, the participant will recognize ordinary income with respect to the award to the extent of the excess of the fair market value of the stock at the time of grant over the participant's cost, if any, and the same amount is deductible by us, assuming that a deduction is allowed under Section 162(m) of the Code. If a stock unit award or other stock-based award is granted but no stock is actually issued to the participant at the time the award is granted, the participant will recognize ordinary income at the time the participant receives the stock free of any substantial risk of forfeiture (or receives cash in lieu of such stock) and the amount of such income will be equal to the fair market value of the stock at such time over the participant's cost, if any, and the same amount is then deductible by us, assuming that a deduction is allowed under Section 162(m) of the Code.

Annual Performance Cash Awards and Other Cash-Based Awards. Annual performance cash awards and other cash-based awards will be taxable as ordinary income to the participant in the amount of the cash received by the participant (before reduction for any withholding taxes), and we will receive a corresponding deduction in an amount equal to the ordinary income recognized by the participant, assuming that a deduction is allowed under Section 162(m) of the Code.

Withholding Obligations. We are entitled to withhold and deduct from future wages of the participant, to make other arrangements for the collection of, or to require the participant to pay to us, an amount necessary for us to satisfy the participant's federal, state, or local tax withholding obligations with respect to awards granted under the 2024 plan. Withholding for taxes may be calculated based on the maximum applicable tax rate for the participant's jurisdiction or such other rate that will not trigger a negative accounting impact on NTIC. The Compensation Committee may permit a participant to satisfy a tax withholding obligation by withholding shares of common stock underlying an award, tendering previously acquired shares, delivery of a broker exercise notice, or a combination of these methods.

Code Section 409A. A participant may be subject to a 20% penalty tax, in addition to ordinary income tax, at the time a grant becomes vested, plus an interest penalty tax, if the grant constitutes deferred compensation under Section 409A of the Code and the requirements of Section 409A of the Code are not satisfied.

Code Section 162(m). Pursuant to Section 162(m) of the Code, the annual compensation paid to an individual who is a "covered employee" may not be deductible to the extent it exceeds \$1 million. The Tax Cut and Jobs Act, signed into law on December 22, 2017, amended Section 162(m), effective for tax years beginning after December 31, 2017, (i) to expand the definition of a "covered employee" to include any person who was the Chief Executive Officer or the Chief Financial Officer at any time during the year and the three most highly compensated officers (other than the Chief Executive Officer or the Chief Financial Officer) who were employed at any time during the year whether or not the compensation is reported in the Summary Compensation Table included in our proxy statement for our Annual Meeting; (ii) to treat any individual who is considered a covered employee at any time during a tax year beginning

after December 31, 2017 as remaining a covered employee permanently; and (iii) to eliminate the performance-based compensation exception to the \$1 million deduction limit (with a transition provision continuing the performance-based exception for certain compensation covered by a written binding contract in existence on November 2, 2017).

Excise Tax on Parachute Payments. Unless otherwise provided in a separate agreement between a participant and NTIC, if, with respect to a participant, the acceleration of the vesting of an award or the payment of cash in exchange for all or part of an award, together with any other payments that such participant has the right to receive from NTIC, would constitute a "parachute payment," then the payments to such participant will be reduced to the largest amount as will result in no portion of such payments being subject to the excise tax imposed by Section 4999 of the Code. Such reduction, however, will only be made if the aggregate amount of the payments after such reduction exceeds the difference between the amount of such payments absent such reduction minus the aggregate amount of the excise tax imposed under Section 4999 of the Code attributable to any such excess parachute payments. If such provisions are applicable and if an employee will be subject to a 20% excise tax on any "excess parachute payment" pursuant to Section 280G of the Code.

New Plan Benefits

It is not presently possible to determine the benefits or amounts that will be received by or allocated to participants under the 2024 plan or would have been received by or allocated to participants for the last completed fiscal year if the 2024 plan had then been in effect because awards under the 2024 plan will be made at the discretion of the Compensation Committee. However, under the policy currently in effect, each non-employee director who is expected to stand for re-election at the next annual meeting of stockholders will receive a stock option, or RSUs if elected by such director, valued at \$50,000 on each September 1st, and our Chairman of the Board of Directors will receive an additional stock option valued at \$10,000.

Board Recommendation

The Board of Directors unanimously recommends that stockholders vote **FOR** approval of the Northern Technologies International Corporation 2024 Stock Incentive Plan.

The Board of Directors Recommends a Vote FOR Proposal Four

STOCK OWNERSHIP

Beneficial Ownership of Significant Stockholders and Management

The following table sets forth information known to us with respect to the beneficial ownership of our common stock as of November 21, 2023, the record date for the Annual Meeting, for:

- each person known by us to beneficially own more than five percent of the outstanding shares of our common stock;
- each of our directors and director nominees;
- each of the executive officers named in the Summary Compensation Table included later in this proxy statement under "*Executive Compensation*"; and
- all of our current directors, director nominees, and executive officers as a group.

The number of shares beneficially owned by a person includes shares subject to options held by that person that are currently exercisable or that become exercisable within 60 days of November 21, 2023. Percentage calculations assume, for each person and group, that all shares that may be acquired by such person or group pursuant to options currently exercisable or that become exercisable within 60 days of November 21, 2023 are outstanding for the purpose of computing the percentage of common stock owned by such person or group. However, such unissued shares of common stock described above are not deemed to be outstanding for calculating the percentage of common stock owned by any other person.

Except as otherwise indicated, the persons in the table below have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them, subject to community property laws where applicable and subject to the information contained in the notes to the table.

Title of Class	Name and Address of Beneficial Owner ⁽¹⁾	Amount and Nature of Beneficial Ownership ⁽²⁾	Percent of Class	
	etor Nominees, and Officers:			
Common Stock	Nancy E. Calderon	34,367	*	
Common Stock	Sarah E. Kemp	35,736	*	
Common Stock	Sunggyu Lee, Ph.D.	3,319	*	
Common Stock	G. Patrick Lynch ⁽³⁾	1,505,600	15.6%	
Common Stock	Ramani Narayan, Ph.D.	119,168	1.3%	
Common Stock	Richard J. Nigon	117,802	1.2%	
Common Stock	Cristina Pinho	5,511	*	
Common Stock	Konstantin von Falkenhausen	87,368	*	
Common Stock	Matthew C. Wolsfeld	308,017	3.2%	
Common Stock	All directors, director nominees, and executive			
	officers as a group (9 persons) ⁽⁴⁾	2,216,888	22.1%	
Significant Beneficial Owners:				
Common Stock	Inter Alia Holding Company ⁽⁵⁾ 23205 Mercantile Road Beachwood, Ohio 44122	1,203,334	12.8%	

Title of Class	Name and Address of Beneficial Owner ⁽¹⁾	Amount and Nature of Beneficial Ownership ⁽²⁾	Percent of Class
Common Stock	Punch & Associates Investment Management, Inc. ⁽⁶⁾ 7701 France Avenue South Suite 300	525,328	5.6%
	Edina, Minnesota 55435		

* Represents beneficial ownership of less than one percent.

- (1) The business address for each of the directors, director nominees, and officers of NTIC is c/o Northern Technologies International Corporation, 4201 Woodland Road, Circle Pines, Minnesota 55014.
- (2) Includes for the persons listed below the following shares of common stock subject to options held by such persons that are currently exercisable or become exercisable within 60 days of November 21, 2023:

Name	Shares of Common Stock Underlying Stock Options
Directors and Director Nominees	
Nancy E. Calderon	31,251
Sarah E. Kemp	31,251
Sunggyu Lee, Ph.D.	0
G. Patrick Lynch	199,760
Ramani Narayan, Ph.D	12,405
Richard J. Nigon	84,202
Cristina Pinho	5,511
Konstantin von Falkenhausen	72,168
Named Executive Officers	
G. Patrick Lynch	199,760
Matthew C. Wolsfeld	147,648
All current directors, director nominees, and executive officers as a	
group (9 persons)	584,196

- (3) Includes 1,203,334 shares held by Inter Alia Holding Company. See note (5) below.
- (4) The amount beneficially owned by all current directors, director nominees, and executive officers as a group includes 1,203,334 shares held of record by Inter Alia Holding Company. See notes (3) above and (5) below.
- According to a Schedule 13D/A filed with the SEC on October 22, 2019, Inter Alia Holding Company is an entity of which G. Patrick Lynch, our President and Chief Executive Officer, is a 47% stockholder.
 G. Patrick Lynch shares equal voting and dispositive power over such shares with two other members of his family. Inter Alia Holding Company's address is 23205 Mercantile Road, Beachwood, Ohio 44122.
- According to a Schedule 13G/A filed with the SEC on February 13, 2023, Punch & Associates Investment Management, Inc. ("Punch & Associates") has sole voting and dispositive power over 525,328 shares.
 Punch & Associate's address is 7701 France Avenue South, Suite 300, Edina, Minnesota 55435.

Stock Ownership Guidelines

In November 2021, we adopted stock ownership guidelines that are intended to further align the interests of our directors and executive officers with those of our stockholders. The stock ownership guidelines for our directors and executive officers are as follows:

Position	Guideline
Non-Employee Director	3x annual cash retainer
Chief Executive Officer	6x annual base salary
Other Executive Officers	3x annual base salary

Each director and executive officer has five years from the establishment of these guidelines and, thereafter, from the date of appointment or hire or, if the ownership multiple has increased during such director's or executive's tenure, five years from the date established in connection with such increase to reach his or her ownership targets. Both our Chief Executive Officer and Chief Financial Officer are in compliance with these guidelines, as are most of our longer serving directors.

Securities Authorized for Issuance Under Equity Compensation Plans

The following table summarizes outstanding options and other awards under NTIC's equity compensation plans as of August 31, 2023. NTIC's equity compensation plans as of August 31, 2023 were the Northern Technologies International Corporation Amended and Restated 2019 Stock Incentive Plan, the Northern Technologies International Corporation Amended and Restated 2007 Stock Incentive Plan, and the Northern Technologies International Corporation Employee Stock Purchase Plan. Except for automatic annual grants of \$50,000 in options to purchase shares of NTIC common stock, or RSUs if so elected, to NTIC's directors in consideration for their services as directors of NTIC and an automatic annual grant of \$10,000 in options to purchase shares of NTIC common stock to NTIC's Chairman of the Board in consideration for his services as Chairman, in each case on the first day of each fiscal year, and automatic initial pro rata grants of \$50,000 in options to purchase shares of NTIC common stock to NTIC's new directors in consideration for their services as directors of NTIC on the first date of their appointment as directors, options and other awards granted in the future under the Northern Technologies International Corporation Amended and Restated 2019 Stock Incentive Plan are within the discretion of the Board of Directors and the Compensation Committee of the Board of Directors and, therefore, cannot be ascertained at this time. No future grants of options or other stock awards will be made under the Northern Technologies International Corporation Amended and Restated 2007 Stock Incentive Plan.

Plan Category	(a) Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	(b) Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	1,557,130 ⁽¹⁾⁽²⁾	\$11.08	488,937 ⁽³⁾
Equity compensation plans not approved by security holders Total	1,557,130 ⁽¹⁾⁽²⁾	\$11.08	488,937 ⁽³⁾

- (1) Amount includes 439,559 shares of NTIC common stock issuable upon the exercise of stock options outstanding as of August 31, 2023 under the Northern Technologies International Corporation Amended and Restated 2007 Stock Incentive Plan and 1,117,571 shares of NTIC common stock issuable upon the exercise of stock options outstanding as of August 31, 2023 under the Northern Technologies International Corporation Amended and Restated 2019 Stock Incentive Plan.
- (2) Excludes employee stock purchase rights accruing under the Northern Technologies International Corporation Employee Stock Purchase Plan. Under such plan, each eligible employee may purchase up to 2,000 shares of NTIC common stock at semi-annual intervals on February 28th or 29th (as the case may be) and August 31st each year at a purchase price per share equal to 90% of the lower of (i) the closing sales price per share of NTIC common stock on the first day of the offering period or (ii) the closing sales price per share of NTIC common stock on the last day of the offering period.
- (3) Amount includes 426,903 shares available as of August 31, 2023 for future issuance under Northern Technologies International Corporation Amended and Restated 2019 Stock Incentive Plan and 62,034 shares available at August 31, 2023 for future issuance under the Northern Technologies International Corporation Employee Stock Purchase Plan.

CORPORATE GOVERNANCE

_

Governance Best Practices

We maintain several corporate governance best practices, which are designed to promote actions that benefit our stockholders and create a framework for our decision-making.

Annual election of all directors	All directors are elected annually for a one-year term.	
"Plurality plus" vote standard for uncontested director elections, with a director resignation policy	In an uncontested election, any director nominee who receives a greater number of votes "withheld" from his or her election than votes "for" is required to tender a written offer to resign from the Board.	
Three-fourths of our directors are independent	Six of the eight directors on our Board are independent.	
Annual Board and committee evaluations	It is our practice to conduct annual Board and committees performance self-evaluations.	
No poison pill	We believe that not having a poison pill benefits our stockholders by not discouraging takeover attempts that may increase value for our stockholders.	
Board oversight of ESG initiatives	While the Nominating and Corporate Governance Committee has been delegated oversight authority of our ESG initiatives, it coordinates with our other two standing Board committees.	
Emphasis on gender and racial/ethnic diversity in Board refreshment efforts	The Board has added three female directors since October 2019 and one director from Brazil in January 2023.	
Robust stockholder outreach program	Each year, our executives hold meetings to seek stockholder input and strive to take actions that reflect the input received.	
Annual say-on-pay vote	Our Board recommended, and our stockholders voted in favor of, an annual advisory stockholder vote on executive compensation.	
Officer and director stock ownership requirements	We have robust stock ownership guidelines for our directors and officers that require maintenance of a specified level of ownership based on compensation.	
Hedging and pledging prohibitions	We prohibit our executives from engaging in any hedging transactions, short sales, transactions in publicly traded options, such as puts, calls and other derivatives, short-term trading and pledging our securities.	
Robust clawback policy	We maintain a robust clawback policy pursuant to which we may recover cash and equity incentive compensation from current or former officers in the event of a restatement or other egregious behavior.	
Single class of stock	We have a single class of stock, so our stockholders all have equal voting rights.	

Corporate Governance Guidelines

The Board of Directors has adopted Corporate Governance Guidelines. A copy of these Corporate Governance Guidelines can be found on the "Investor Relations—Corporate Governance" section of our corporate website *www.ntic.com*. Among the topics addressed in our Corporate Governance Guidelines are:

- Board size, composition and qualifications
- Selection of directors
- New director orientation
- Board leadership
- CEO succession planning
- Board committees
- Board and committee meetings
- Executive sessions of independent directors
- Meeting attendance by directors and nondirectors
- Appropriate information and access
- Ability to retain advisors
- Conflicts of interest and director independence
- Board interaction with corporate constituencies
- Retirement and term limits
- Retirement and resignation policy
- Stock ownership guidelines

Board Leadership Structure

- Procedures for directors who receive less than a majority vote
- Change of principal occupation and board memberships and limits on board memberships held
- Board compensation
- Stock ownership by directors and executive officers
- Loans to directors and executive officers
- CEO evaluation
- Board and committee evaluation
- Director continuing education
- Succession planning
- Related person transactions
- Communications with directors
- Duty of loyalty and confidentiality

Under our Corporate Governance Guidelines, the office of Chairman of the Board and Chief Executive Officer may or may not be held by one person. The Board of Directors believes it is best not to have a fixed policy on this issue and that it should be free to make this determination based on what it believes is best under the circumstances. However, the Board of Directors strongly endorses the concept of an independent director being in a position of leadership. Under our Corporate Governance Guidelines, if at any time the Chief Executive Officer and Chairman of the Board positions are held by the same person, the Board of Directors will elect an independent director as a lead independent director.

G. Patrick Lynch currently serves as our President and Chief Executive Officer, and Richard J. Nigon serves as our non-executive Chairman of the Board. Because the Chief Executive Officer and Chairman of the Board positions currently are not held by the same person, we do not have a lead independent director. We currently believe this leadership structure is in the best interests of NTIC and our stockholders and strikes the appropriate balance between the Chief Executive Officer's responsibility for the strategic direction, day-to-day-leadership and performance of NTIC and the Chairman's responsibility to provide oversight of NTIC's corporate governance and guidance to our Chief Executive Officer and to set the agenda for and preside over Board of Directors meetings.

At each regular Board of Directors meeting, our independent directors meet in executive session with no company management present during a portion of the meeting. After each such executive session, our Chairman of the Board provides our Chief Executive Officer with any actionable feedback from our independent directors.

Director Independence

The Board of Directors has affirmatively determined that six of NTIC's current eight directors are "independent directors" under the Listing Rules of the Nasdaq Stock Market: Nancy E. Calderon, Sarah E. Kemp, Sunggyu Lee, Ph.D., Richard J. Nigon, Cristina Pinho and Konstantin von Falkenhausen.

In making these affirmative determinations that such individuals are "independent," the Board of Directors reviewed and discussed information provided by the directors and by NTIC with regard to each director's business and personal activities as they may relate to NTIC and NTIC's management.

Board Meetings and Attendance

The Board of Directors met five times during the fiscal year ended August 31, 2023. Each of our current directors attended at least 75% of the aggregate of the total number of meetings of the Board and the total number of meetings held by all Board committees on which the director served.

Board Committees

The Board of Directors has a standing Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee, each of which has the composition and responsibilities described below. The Board of Directors, from time to time, may establish other committees to facilitate the management of NTIC and may change the composition and responsibilities of our existing committees. Each of the Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee operates under a written charter adopted by the Board of Directors, which can be found on the "Investor Relations—Corporate Governance" section of our corporate website *www.ntic.com*.

The following table summarizes the current membership of each of our t	ree Board committees.
The following table building the building the building of building of building	nee Bourd committees.

Director	Audit	Compensation	Nominating and Corporate Governance
Nancy E. Calderon	Chair		
Sarah E. Kemp		—	Chair
Sunggyu Lee, Ph.D.			
G. Patrick Lynch	—	—	—
Ramani Narayan, Ph.D.	—	—	—
Richard J. Nigon	\checkmark		\checkmark
Cristina Pinho	—	—	\checkmark
Konstantin von Falkenhausen	\checkmark	Chair	—

Audit Committee

Responsibilities. The Audit Committee provides assistance to the Board of Directors in fulfilling its responsibilities for oversight, for quality and integrity of the accounting, auditing, reporting practices, systems of internal accounting and financial controls, the annual independent audit of our financial statements, and the legal compliance and ethics programs of NTIC as established by management. The Audit Committee's primary responsibilities include:

- overseeing our financial reporting process, internal control over financial reporting and disclosure controls and procedures on behalf of the Board of Directors;
- having sole authority to appoint, retain and oversee the work of our independent registered public accounting firm and establish the compensation to be paid to the firm;

- reviewing and pre-approving all audit services and permissible non-audit services to be provided to NTIC by our independent registered public accounting firm;
- establishing procedures for the receipt, retention and treatment of complaints regarding accounting, internal accounting controls or auditing matters and for the confidential, anonymous submission by our employees of concerns regarding questionable accounting or auditing matters;
- overseeing the establishment and administration of (including the grant of any waiver from) a written code of ethics applicable to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions;
- receiving periodic updates from senior management on NTIC's policies, processes, procedures and any significant developments related to the identification, mitigation and remediation of cybersecurity risks and reviewing the cybersecurity disclosures required to be included in NTIC's SEC filings; and
- coordinating with the Nominating and Corporate Governance Committee in that committee's primary oversight over NTIC's ESG activities.

The Audit Committee has the authority to engage the services of outside experts and advisors as it deems necessary or appropriate to carry out its duties and responsibilities.

Composition. The current members of the Audit Committee are Ms. Calderon, Mr. Nigon, and Mr. von Falkenhausen. Ms. Calderon is the current Chair of the Audit Committee.

Each member of the Audit Committee who served during fiscal 2023 is considered "independent" for purposes of membership on audit committees pursuant to the Listing Rules of the Nasdaq Stock Market and the rules and regulations of the SEC and is "financially literate" as required by the Listing Rules of the Nasdaq Stock Market. In addition, the Board of Directors has determined that Ms. Calderon and Mr. Nigon qualify as "audit committee financial experts" as defined by the rules and regulations of the SEC and meet the qualifications of "financial sophistication" under the Listing Rules of the Nasdaq Stock Market as a result of their extensive financial backgrounds and various financial positions they have held throughout their respective careers. Stockholders should understand that these designations related to our Audit Committee members' experience and understanding with respect to certain accounting and auditing matters do not impose upon any of them any duties, obligations or liabilities that are greater than those generally imposed on a member of the Audit Committee or of the Board of Directors.

Meetings. The Audit Committee met four times during fiscal 2023 and once in executive session with Baker Tilly, our independent registered public accounting firm.

Audit Committee Report. This report is furnished by the Audit Committee of the Board of Directors with respect to NTIC's financial statements for the fiscal year ended August 31, 2023.

One of the purposes of the Audit Committee is to oversee NTIC's accounting and financial reporting processes and the audit of NTIC's annual financial statements. NTIC's management is responsible for the preparation and presentation of complete and accurate financial statements. NTIC's independent registered public accounting firm, Baker Tilly US, LLP, is responsible for performing an independent audit of NTIC's financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States) and for issuing a report on their audit.

In performing its oversight role, the Audit Committee has reviewed and discussed NTIC's audited financial statements for the fiscal year ended August 31, 2023 with NTIC's management. Management

represented to the Audit Committee that NTIC's financial statements were prepared in accordance with generally accepted accounting principles. The Audit Committee has discussed with Baker Tilly US, LLP, NTIC's independent registered public accounting firm, the matters required to be discussed under Public Company Accounting Oversight Board standards. The Audit Committee has received the written disclosures and the letter from Baker Tilly US, LLP required by applicable requirements of the Public Company Accounting Oversight Board regarding Baker Tilly US, LLP's communications with the Audit Committee concerning independence. The Audit Committee has discussed with Baker Tilly US, LLP its independence and concluded that the independent registered public accounting firm is independent from NTIC and NTIC's management.

Based on the review and discussions of the Audit Committee described above, in reliance on the unqualified opinion of Baker Tilly US, LLP regarding NTIC's audited financial statements, and subject to the limitations on the role and responsibilities of the Audit Committee discussed above and in the Audit Committee's charter, the Audit Committee recommended to the Board of Directors that NTIC's audited financial statements for the fiscal year ended August 31, 2023 be included in its Annual Report on Form 10-K for the fiscal year ended August 31, 2023 for filing with the Securities and Exchange Commission.

This report is dated as of November 9, 2023.

Audit Committee

Nancy E. Calderon, Chair Richard J. Nigon Konstantin von Falkenhausen

Other Information. Additional information regarding the Audit Committee and our independent registered public accounting firm is disclosed under the "*Proposal Three*—*Ratification of Appointment of Independent Registered Public Accounting Firm*" section of this proxy statement.

Compensation Committee

Responsibilities. The Compensation Committee provides assistance to the Board of Directors in fulfilling its oversight responsibility relating to compensation of our Chief Executive Officer and other executive officers and administers our equity compensation plans. The Compensation Committee's primary responsibilities include:

- recommending to the Board of Directors for its determination the annual salaries, incentive compensation, long-term compensation and any and all other compensation applicable to our executive officers;
- establishing and, from time to time, reviewing and revising corporate goals and objectives with respect to compensation for our executive officers and establishing and leading a process for the full Board of Directors to evaluate the performance of our executive officers in light of those goals and objectives;
- administering our equity compensation plans and recommending to the Board of Directors for its determination grants of options or other equity-based awards for executive officers, employees and independent consultants under our equity compensation plans;
- reviewing our policies with respect to employee benefit plans;
- establishing and, from time to time, reviewing and revising processes and procedures for the consideration and determination of executive compensation;

- overseeing and periodically reviewing NTIC's culture and policies and strategies related to human capital management and reviewing the human capital management disclosures included in NTIC's annual reports on Form 10-K; and
- coordinating with the Nominating and Corporate Governance Committee in that committee's primary oversight over NTIC's ESG activities.

The Compensation Committee has the authority to engage the services of outside experts and advisors as it deems necessary or appropriate to carry out its duties and responsibilities, and prior to doing so, assesses the independence of such experts and advisors from management.

Composition. The current members of the Compensation Committee are Dr. Lee, Mr. Nigon and Mr. von Falkenhausen. Mr. von Falkenhausen is the current Chair of the Compensation Committee.

The Board of Directors has determined that each of the members of the Compensation Committee who served during fiscal 2023 is considered an "independent director" under the Listing Rules of the Nasdaq Stock Market, a "non-employee director" within the meaning of Rule 16b-3 under the Exchange Act, and otherwise independent under the rules and regulations of the SEC.

Processes and Procedures for Consideration and Determination of Executive Compensation. As described in more detail above under "—*Responsibilities*," the Board of Directors has delegated to the Compensation Committee the responsibility, among other things, to recommend to the Board of Directors any and all compensation payable to our executive officers, including annual salaries, incentive compensation and long-term incentive compensation, and to administer our equity and incentive compensation plans applicable to our executive officers. Decisions regarding executive compensation made by the Compensation Committee are not considered final and are subject to final review and approval by the entire Board of Directors. Under the terms of its formal written charter, the Compensation Committee has the power and authority, to the extent permitted by our Bylaws and applicable law, to delegate all or a portion of its duties and responsibilities to a subcommittee of the Compensation Committee. The Compensation Committee has not generally delegated any of its duties and responsibilities to subcommittees, but rather has taken such actions as a committee, as a whole.

Our President and Chief Executive Officer and our Chief Financial Officer assist the Compensation Committee in gathering compensation related data regarding our executive officers and making recommendations to the Compensation Committee regarding the form and amount of compensation to be paid to each executive officer. In making final recommendations to the Board of Directors regarding compensation to be paid to our executive officers, the Compensation Committee considers the recommendations of our President and Chief Executive Officer and our Chief Financial Officer, but also considers other factors, such as its own views as to the form and amount of compensation to be paid, the achievement by NTIC of pre-established performance objectives, the general performance of NTIC and the individual officers, the performance of NTIC's stock price and other factors that may be relevant.

Final deliberations and decisions by the Compensation Committee regarding its recommendations to the Board of Directors of the form and amount of compensation to be paid to our executive officers are made by the Compensation Committee, without the presence of any executive officer of NTIC. In making final decisions regarding compensation to be paid to our executive officers, the Board of Directors considers the same factors and gives considerable weight to the recommendations of the Compensation Committee.

Meetings. The Compensation Committee met four times during fiscal 2023.

Nominating and Corporate Governance Committee

Responsibilities. The primary responsibilities of the Nominating and Corporate Governance Committee include:

- identifying individuals qualified to become members of the Board of Directors;
- recommending director nominees for each annual meeting of our stockholders and director nominees to fill any vacancies that may occur between meetings of stockholders;
- making recommendations to the Board of Directors regarding director diversity (which may include diversity of age, gender, race, ethnicity, education, skills, professional experience, knowledge, backgrounds and viewpoints), retirement age, tenure and refreshment policies;
- being aware of best practices in corporate governance matters;
- developing and overseeing an annual Board of Directors and Board committee evaluation process;
- establishing and leading a process for determination of the compensation applicable to the non-employee directors on the Board;
- overseeing NTIC's ESG activities and coordinating with and soliciting input from the Compensation Committee and the Audit Committee in formulating the approach to NTIC's ESG activities.

The Nominating and Corporate Governance Committee has the authority to engage the services of outside experts and advisors as it deems necessary or appropriate to carry out its duties and responsibilities.

Composition. The current members of the Nominating and Corporate Governance Committee are Ms. Kemp, Ms. Calderon, Mr. Nigon and Ms. Pinho. Ms. Kemp is the current chair of the Nominating and Corporate Governance Committee.

The Board of Directors has determined that each of the members of the Nominating and Corporate Governance Committee who served during fiscal 2023 is considered an "independent director" under the Listing Rules of the Nasdaq Stock Market.

Processes and Procedures for Consideration and Determination of Director Compensation. As mentioned above under "—*Responsibilities*," the Board of Directors has delegated to the Nominating and Corporate Governance Committee the responsibility, among other things, to review and make recommendations to the Board of Directors concerning compensation for non-employee members of the Board of Directors, including but not limited to retainers, meeting fees, committee chair and member retainers and equity compensation. Decisions regarding director compensation made by the Nominating and Corporate Governance Committee are not considered final and are subject to final review and approval by the entire Board of Directors. Under the terms of its formal written charter, the Nominating and Corporate Governance Committee has the power and authority, to the extent permitted by our Bylaws and applicable law, to delegate all or a portion of its duties and responsibilities to a subcommittee of the Nominating and Corporate Governance Committee. The Nominating and Corporate Governance Committee has not generally delegated any of its duties and responsibilities to subcommittees, but rather has taken such actions as a committee, as a whole.

In making recommendations to the Board of Directors regarding compensation to be paid to our nonemployee directors, the Nominating and Corporate Governance Committee considers fees and other compensation paid to directors of comparable public companies, the number of board and committee meetings that our directors are expected to attend, and other factors that may be relevant. In making final decisions regarding non-employee director compensation, the Board of Directors considers the same factors and the recommendation of the Nominating and Corporate Governance Committee.

Meetings. The Nominating and Corporate Governance Committee met four times during fiscal 2023.

Director Nominations Process

Pursuant to a Director Nominations Process adopted by the Board of Directors, in selecting nominees for the Board of Directors, the Nominating and Corporate Governance Committee first determines whether the incumbent directors are qualified to serve, and wish to continue to serve, on the Board. The Nominating and Corporate Governance Committee believes that NTIC and its stockholders benefit from the continued service of qualified incumbent directors because those directors have familiarity with and insight into NTIC's affairs that they have accumulated during their tenure with NTIC. Appropriate continuity of Board membership also contributes to the Board's ability to work as a collective body. Accordingly, it is the practice of the Nominating and Corporate Governance Committee, in general, to renominate an incumbent director if the director wishes to continue his or her service with the Board, the director continues to satisfy the criteria for membership on the Board that the Nominating and Corporate Governance Committee generally views as relevant and considers in deciding whether to re-nominate an incumbent director or nominate a new director, the Nominating and Corporate Governance Committee believes the director continues to make important contributions to the Board, and there are no special, countervailing considerations against re-nomination of the director.

Pursuant to a Director Nominations Process adopted by the Board of Directors, in identifying and evaluating new candidates for election to the Board, the Nominating and Corporate Governance Committee solicits recommendations for nominees from persons whom the Nominating and Corporate Governance Committee believes are likely to be familiar with qualified candidates having the qualifications, skills and characteristics required for Board nominees from time to time. Such persons may include members of the Board of Directors and our senior management and advisors to NTIC. In addition, from time to time, if appropriate, the Nominating and Corporate Governance Committee may engage a search firm to assist it in identifying and evaluating qualified candidates. We found our newest director, Cristina Pinho, through the Women Corporate Directors Foundation.

The Nominating and Corporate Governance Committee reviews and evaluates each candidate whom it believes merits serious consideration, taking into account available information concerning the candidate, any qualifications or criteria for Board membership established by the Nominating and Corporate Governance Committee, the existing composition of the Board, and other factors that it deems relevant. In conducting its review and evaluation, the Nominating and Corporate Governance Committee solicits the views of our management, other Board members, and other individuals it believes may have insight into a candidate. The Nominating and Corporate Governance Committee nay designate one or more of its members and/or other Board members to interview any proposed candidate.

The Nominating and Corporate Governance Committee will consider recommendations for the nomination of directors submitted by our stockholders. For more information, see the information set forth under "Stockholder Proposals and Director Nominations for the 2025 Annual Meeting of Stockholders – Director Nominations for 2025 Annual Meeting." The Nominating and Corporate Governance Committee will evaluate candidates recommended by stockholders in the same manner as those recommended as stated above.

There are no formal requirements or minimum qualifications that a candidate must meet in order for the Nominating and Corporate Governance Committee to recommend the candidate to the Board. The

Nominating and Corporate Governance Committee believes that each nominee should be evaluated based on his or her merits as an individual, taking into account the needs of NTIC and the Board of Directors. However, in evaluating candidates, there are a number of criteria that the Nominating and Corporate Governance Committee generally views as relevant and is likely to consider. Some of these factors include whether the candidate is an "independent director" under the Listing Rules of the Nasdaq Stock Market and meets any other applicable independence tests under the federal securities laws and rules and regulations of the SEC; whether the candidate is "financially literate" and otherwise meets the requirements for serving as a member of an audit committee under the Listing Rules of the Nasdaq Stock Market; whether the candidate is "financially sophisticated" under the Listing Rules of the Nasdaq Stock Market and an "audit committee financial expert" under the federal securities laws and the rules and regulations of the SEC; the needs of NTIC with respect to the particular talents and experience of its directors; the personal and professional integrity and reputation of the candidate; the candidate's level of education and business experience; the candidate's broad-based business acumen; the candidate's level of understanding of our business and its industry; the candidate's ability and willingness to devote adequate time to the work of the Board of Directors and its committees: the fit of the candidate's skills and personality with those of other directors and potential directors in building a board that is effective, collegial and responsive to the needs of NTIC; whether the candidate possesses strategic thinking and a willingness to share ideas; the candidate's diversity of experiences, expertise, background and other attributes; and the candidate's ability to represent the interests of all stockholders and not a particular interest group.

While we do not have a formal stand-alone diversity policy in considering whether to recommend any director nominee, including candidates recommended by stockholders, and the Board of Directors has not adopted a formal definition of diversity, the Board's diversity is a consideration in the director nomination process. As discussed above, the Nominating and Corporate Governance Committee considers the factors described above, including the candidate's diversity of experiences, expertise, background and other attributes. The Nominating and Corporate Governance Committee seeks nominees with a broad diversity of experience, expertise, backgrounds and other attributes, including diversity of age, gender, race, ethnicity, education, skills, knowledge, and viewpoints. The Nominating and Corporate Governance Committee does not assign specific weights to particular criteria and no particular criterion is necessarily applicable to all prospective nominees. The Board of Directors believes that the backgrounds and qualifications of directors, considered as a group, should provide a significant mix of experience, knowledge and abilities that will allow the Board of Directors to fulfill its responsibilities.

For this year's election of directors, the Board of Directors has nominated eight individuals, all of whom are current directors. Collectively, these directors bring tremendous diversity to the Board. Each director is a strategic thinker and has varying, specialized experience in the areas relevant to NTIC and its businesses. Moreover, their collective experience covers a wide range of geographies and industries, and roles in academia, corporate governance and government. The eight directors range in age from 56 to 75; three of the eight directors are women; two are of Asian descent; one is of African descent; one is a citizen of Brazil, one is a citizen of the Republic of Korea and one is a citizen of Germany.

Board Diversity Matrix

The Nasdaq listing requirements require each listed company to have, or explain why it does not have, two diverse directors on the board, including at least one diverse director who self-identifies as female and one diverse director who self-identifies as an underrepresented minority or LGBTQ+ (subject to the exceptions). Our current Board composition is in compliance with the Nasdaq diversity requirement.

The table below provides certain highlights of the composition of our board members and nominees. Each of the categories listed in the below table has the meaning as it is used in Nasdaq Rule 5605(f).

Board Diversity Matrix (As of November 21, 2023)					
Total Number of Directors	8				
	Female	Male	Non- Binary	Did Not Disclosure Gender	
Part I: Gender Identity					
Directors	3	5			
Part II: Demographic Background					
African American or Black	1				
Alaskan Native or Native American					
Asian		2			
Hispanic or Latinx					
Native Hawaiian or Pacific Islander					
White	2	3			
Two or More Races or Ethnicities				—	
LGBTQ+	—				
Did Not Disclose Demographic Background	ind —				

Board Oversight of Risk

The Board of Directors as a whole has responsibility for risk oversight, with more in-depth reviews of certain areas of risk being conducted by the relevant Board committees that report on their deliberations to the full Board of Directors. The oversight responsibility of the Board and its committees is enabled by management reporting processes that are designed to provide information to the Board about the identification, assessment and management of critical risks and management's risk mitigation strategies. The areas of risk that we focus on include operational, financial (accounting, credit, liquidity and tax), legal, compensation, competitive, cybersecurity, health, safety, environmental, economic, political and reputational risks.

The standing committees of the Board of Directors oversee risks associated with their respective principal areas of focus. The Audit Committee's role includes a particular focus on the qualitative aspects of financial reporting, on our processes for the management of business and financial risk, our financial reporting obligations and for compliance with significant applicable legal, ethical and regulatory requirements. The Audit Committee, along with management, is also responsible for developing and participating in a process for review of important financial and operating topics that present potential significant risk to NTIC. The Compensation Committee is responsible for overseeing risks and exposures associated with our executive compensation programs and arrangements. The Nominating and Corporate Governance Committee oversees risks relating to our corporate governance matters, director compensation programs and director succession planning.

We recognize that a fundamental part of risk management is understanding not only the risks a company faces and what steps management is taking to manage those risks, but also understanding what level of risk is appropriate for NTIC. The involvement of the full Board of Directors each year in establishing our key corporate business strategies and annual fiscal budget is a key part of the Board of Directors' assessment of management's appetite for risk and also a determination of what constitutes an appropriate level of risk for NTIC.

We believe our current Board leadership structure is appropriate and helps ensure proper risk oversight for NTIC for a number of reasons, including: (1) general risk oversight by the full Board of Directors in connection with its role in reviewing our key business strategies and monitoring on an on-going basis the implementation of our key business strategies; (2) more detailed oversight by our standing Board committees that are currently comprised of and chaired by our independent directors, and (3) the focus of our Chairman of the Board on allocating appropriate Board agenda time for discussion regarding the implementation of our key business strategies and specifically risk management.

Board Oversight of Strategy

The Board of Directors oversees our strategic direction and business activities. Throughout the year, the Board and management discuss our short and long-term business strategy. As part of our long-term strategy, management typically formulates three-year financial targets against which performance is reviewed by the Board. With respect to our short-term strategy, at the beginning of each fiscal year, our management presents to the Board a proposed annual business plan for the year and receives input from the Board and a final annual business plan is approved by the Board. At each subsequent regular board meeting, the Board reviews our operating and financial performance relative to the annual business plan.

Board and Board Committee Evaluations

The Board of Directors recognizes that a thorough evaluation process is an important element of corporate governance and enhances the effectiveness of the full Board and each committee. Therefore, it is our practice to conduct annual Board and committee self-evaluations. Each year, the Nominating and Corporate Governance Committee oversees the evaluation process to ensure that the full Board and each committee conduct an assessment of their performance and solicit feedback for areas of improvement. Evaluations include a variety of survey questions to which directors assign a score and open ended questions and oral interviews. The evaluation results are then aggregated and shared with and discussed by the full Board and each committee.

Code of Ethics

The Board of Directors has adopted a Code of Ethics, which applies to all of our directors, executive officers, including our Chief Executive Officer and Chief Financial Officer, and other employees, and meets the requirements of the SEC and the Nasdaq Stock Market. A copy of our Code of Ethics is available on the "Investor Relations—Corporate Governance" section of our corporate website *www.ntic.com*.

No Political Contributions

NTIC made no political contributions during fiscal 2023 and intends to make no political contributions in the future.

Policy Regarding Director Attendance at Annual Meetings of Stockholders

Although a regular Board of Directors meeting is generally held on the day of each annual meeting of stockholders, this meeting is typically held by video call. It is the policy of the Board of Directors that if a regular in-person Board of Directors meeting occurs on the day of the annual meeting of stockholders, directors standing for re-election should attend the annual meeting of stockholders, if their schedules permit. Since a video call Board meeting was held on the day of last year's annual meeting of stockholders, the only directors who attended the meeting were Mr. Nigon and Mr. Lynch.

Complaint Procedures

The Audit Committee has established procedures for the receipt, retention and treatment of complaints received by NTIC regarding accounting, internal accounting controls or auditing matters, and the submission by our employees, on a confidential and anonymous basis, of concerns regarding questionable accounting or auditing matters. Our personnel with such concerns are encouraged to discuss their concerns with our outside legal counsel, who in turn will be responsible for informing the Audit Committee.

Stockholder Engagement

We are committed to a robust and proactive stockholder engagement program. The Board of Directors values the perspectives of our stockholders, and feedback from stockholders on our business, corporate governance, executive compensation, and sustainability practices are important considerations for Board discussions throughout the year. Some of the actions we have taken in response to feedback from proxy advisory firms and stockholders over the last several years are described below.

What We Heard	What We Did
Encourage Board refreshment	We added two new members to the Board of Directors in October 2019 and one new member in 2023.
Increase Board gender diversity	We added Nancy E. Calderon, Sarah E. Kemp and Cristina Pinho to the Board of Directors and updated our Nominating and Corporate Governance Committee Charter to include responsibility for making recommendations to the Board of Directors regarding director diversity.
Increase stockholder influence over director elections	In November 2020, we adopted a "plurality plus" vote standard for uncontested director elections, with a director resignation policy, instead of a simple plurality vote standard.
Align long-term incentives	We extended the vesting of our annual stock option grants to three-year vesting in response to a concern raised by one of our institutional stockholders.
Increase visibility of ESG principles	We adopted a Health, Safety and Environment Policy as well as a Human Rights Policy to formalize our approach and further our goals with respect to these matters, as described above. We have also added an ESG section to our investor relations website to increase visibility.
Ensure the recovery of incentive compensation based on incorrect calculations that resulted in a financial restatement or egregious behavior	We adopted a robust clawback policy which applies to not only financial restatements but also if an executive engages in egregious conduct that is substantially detrimental to NTIC.
Align the interests of executive officers and directors with those of stockholders	We adopted stock ownership guidelines applicable to our executive officers and directors to ensure that their interests would be closely aligned with those of our stockholders.

Process Regarding Stockholder Communications with Board of Directors

Stockholders may communicate with the Board of Directors or any one particular director by sending correspondence, addressed to NTIC's Corporate Secretary, Northern Technologies International Corporation, 4201 Woodland Road, Circle Pines, MN 55014 with an instruction to forward the communication to the Board of Directors or one or more particular directors. NTIC's Corporate Secretary will promptly forward all such stockholder communications to the Board of Directors or the one or more particular directors, with the exception of any advertisements, solicitations for periodical or other subscriptions and other similar communications.

DIRECTOR COMPENSATION

Summary of Cash and Other Compensation

The table below provides summary information concerning the compensation of each individual who served as a director of NTIC during the fiscal year ended August 31, 2023, other than G. Patrick Lynch, our President and Chief Executive Officer, who was not compensated separately for serving on the Board of Directors during fiscal 2023. His compensation during fiscal 2023 for serving as an executive officer of NTIC is set forth under "*Executive Compensation*" included elsewhere in this proxy statement.

Name	Fees Earned or Paid in Cash (\$)	Option Awards (\$) ⁽¹⁾⁽²⁾	All Other Compensation (\$) ⁽³⁾	Total (\$)
Nancy E. Calderon	\$ 49,000	\$ 50,000	\$	\$ 99,000
Sarah E. Kemp	37,000	50,000	—	87,000
Sunggyu Lee, Ph.D.	35,000	50,000	—	85,000
Ramani Narayan, Ph.D	32,000	50,000	144,000	226,000
Richard J. Nigon	60,500	60,000	—	120,500
Cristina Pinho	25,250	31,855	—	57,105
Konstantin von Falkenhausen	46,500	50,000	—	96,500

DIRECTOR COMPENSATION – FISCAL 2023

(1) The amounts in this column do not reflect the compensation actually received by the directors nor do they reflect the actual value that will be recognized by the directors. Instead, the amounts reflect the grant date fair value for option grants made by us in fiscal 2023, as calculated in accordance with FASB ASC Topic 718.

On September 1, 2022, each of our then current directors, other than Mr. Lynch, received a stock option to purchase 10,309 shares of our common stock at an exercise price of \$11.38 per share granted under the Northern Technologies International Corporation Amended and Restated 2019 Stock Incentive Plan, the material terms of which are described in more detail under "*Executive Compensation—Stock Incentive Plans.*" These options vested in full on September 1, 2023 and will expire on August 31, 2032 or earlier in the case of a director whose service as a director is terminated prior to such date. In addition, on September 1, 2022, Mr. Nigon received an additional stock option to purchase 2,062 shares of our common stock in consideration for his service as Chairman of the Board. The terms of this stock option are identical to the other director stock options granted on that date. See "*—Non-Employee Director Compensation Program—Stock Options.*" The grant date fair value associated with these awards and as calculated in accordance with FASB ASC Topic 718 is determined based on our Black-Scholes option pricing model. The grant date fair value per share for the options granted on September 1, 2022 was \$4.85 and was determined using the following specific assumptions: risk free interest rate: 3.30%; expected life: 10.0 years; expected volatility: 45.2%; and expected dividend yield: 0%.

On January 20, 2023, Ms. Pinho received a stock option to purchase 5,511 shares of our common stock at an exercise price of \$12.95 per share granted under the Northern Technologies International Corporation Amended and Restated 2019 Stock Incentive Plan. This option vests in full on January 20, 2024 and will expire on January 19, 2033 or earlier if her service as a director is terminated prior to such date. The grant date fair value associated with this award and as calculated in accordance with FASB ASC Topic 718 is determined based on our Black-Scholes option pricing model. The grant date fair value per share for the options granted on January 20, 2023 was \$5.78 and was determined using the following specific assumptions: risk free interest rate: 3.43%; expected life: 10.0 years; expected volatility: 45.1%; and expected dividend yield: 0%.

(2) The table below provides information regarding the aggregate number of options to purchase shares of our common stock outstanding at August 31, 2023 and held by each of the directors listed in the Director Compensation Table. Note that because of the grant date, neither the Director Compensation Table nor the table below reflect option grants on September 1, 2023. See "*—Non-Employee Director Compensation Program—Stock Options.*"

Name	Aggregate Number Of Securities Underlying Options	Exercisable/ Unexercisable	Exercise Price(s)	Expiration Date(s)
Nancy E. Calderon	41,560	31,251/10,309	\$ 8.24 - 16.97	10/21/2029 - 08/31/2032
Sarah E. Kemp	41,560	31,251/10,309	8.24 - 16.97	10/21/2029 - 08/31/2032
Sunggyu Lee, Ph.D.	10,309	0/10,309	\$11.38	08/31/2032
Ramani Narayan, Ph.D	22,714	12,405/10,309	\$ 16.97 - 18.23	08/31/2028 - 08/31/2032
Richard J. Nigon	96,573	84,202/12,371	\$ 7.43 - 18.23	08/31/2024 - 08/31/2032
Cristina Pinho	5,511	0/5,511	\$ 12.95	01/19/2033
Konstantin von Falkenhausen.	82,477	72,168/10,309	\$6.70-18.23	08/31/2024 - 08/31/2032

⁽³⁾ We do not provide perquisites or other personal benefits to our directors. The amounts reflected for Dr. Narayan reflects consulting fees paid during the fiscal year ended August 31, 2023 as described in more detail below under "—Consulting Agreement."

Non-Employee Director Compensation Program

Overview. Our non-employee directors for the purposes of our director compensation program currently consist of Nancy E. Calderon, Sarah E. Kemp, Sunggyu Lee, Ph.D., Ramani Narayan, Ph.D., Richard J. Nigon, Cristina Pinho and Konstantin von Falkenhausen. Our non-employee directors for fiscal 2023 were Nancy E. Calderon, Sarah E. Kemp, Sunggyu Lee, Ph.D., Ramani Narayan, Ph.D., Richard J. Nigon, Cristina Pinho and Konstantin von Falkenhausen.

We use a combination of cash and long-term equity-based incentive compensation in the form of annual stock option grants to attract and retain qualified candidates to serve on the Board of Directors. In setting non-employee director compensation, we follow the processes and procedures described under "Corporate Governance—Nominating and Corporate Governance Committee—Processes and Procedures for the Determination of Director Compensation."

Cash Retainers and Meeting Fees. Each of our non-employee directors receives annual cash retainers and meeting fees. The following table sets forth the annual cash retainers paid to our non-employee directors during fiscal 2023:

Description	Annual Cash Retainer
Non-employee Board Member	\$ 25,000
Chairman of the Board	15,000
Audit Committee Chair	5,000
Audit Committee Member (including Chair)	4,500
Compensation Committee Chair	4,000
Compensation Committee (including Chair)	3,000
Nominating and Corporate Governance Committee Chair	2,000
Nominating and Corporate Governance Committee (including Chair)	3,000

Each of our non-employee directors also receives \$1,000 for each Board, Board committee and strategy review meeting attended. No director, however, earns more than \$1,000 per day in Board, Board committee and strategy review meeting fees.

Stock Options/RSU Grants. Pursuant to our non-employee director compensation program, each nonemployee director who is expected to stand for re-election at the next annual meeting of stockholders, is automatically granted a ten-year non-qualified option to purchase \$50,000 in shares of our common stock on the first day of each fiscal year in consideration for his or her service as a director of NTIC, and the Chairman of the Board is automatically granted an additional ten-year non-qualified option to purchase \$10,000 in shares of our common stock on the first day of each fiscal year in consideration for his or her services as Chairman; provided, however, that a non-employee director may elect to receive \$50,000 in restricted stock units ("RSUs") in lieu of options so long as such election is made prior to the grant date. In addition, each new non-employee director is automatically granted a ten-year non-qualified option to purchase a pro rata portion of \$50,000 shares of our common stock calculated by dividing the number of months remaining in the fiscal year at the time of election or appointment by 12 on the date the director is first elected or appointed as a director of NTIC. The number of shares of common stock underlying the options or RSUs is determined based on the grant date fair value of the options or RSUs. Each option becomes exercisable in full on the one-year anniversary of the grant date. The exercise price of such options is equal to the fair market value of a share of NTIC's common stock on the grant date. RSUs will vest on the one-year anniversary of the grant date.

Each non-employee director of NTIC as of the first day of fiscal 2023, September 1, 2022, received a stock option award pursuant to this program. More recently, each current non-employee director of NTIC as of the first day of fiscal 2024, September 1, 2023, received a stock option award pursuant to this program. These stock options will vest in full on the first anniversary of the grant date.

Under the terms of our stock incentive plan, unless otherwise provided in a separate agreement or modified in connection with the termination of a director's service, if a director's service with NTIC terminates for any reason, the unvested portion of options then held by the director will immediately terminate and the director's right to exercise the then vested portion will:

- immediately terminate if the director's service relationship with NTIC terminated for "cause";
- continue for a period of 12 months if the director's service relationship with NTIC terminates as a result of the director's death, disability or retirement; or
- continue for a period of three months if the director's service relationship with NTIC terminates for any reason, other than for cause or upon the director's death, disability or retirement.

If a director's service with NTIC terminates for any reason, the unvested portion of any RSUs such director has elected to receive will immediately be terminated and forfeited.

We refer you to note (1) to the "*Director Compensation Table*" for a summary of all option grants to our non-employee directors during the fiscal year ended August 31, 2023 and note (2) to the "*Director Compensation Table*" for a summary of all options to purchase shares of our common stock held by our non-employee directors as of August 31, 2023.

Reimbursement of Expenses. All of our directors are reimbursed for travel expenses for attending meetings and other miscellaneous out-of-pocket expenses incurred in performing their Board of Directors functions.

Consulting Agreement

NTIC, Bioplastic Polymers LLC and Dr. Narayan are parties to a consulting agreement, pursuant to which Dr. Narayan provides certain consulting services to us relating to our Natur-Tec® business and bioplastics program. The consulting agreement sets out terms for clear separation between Dr. Narayan's work at Michigan State University and any related inventions and his work with us and related inventions. In exchange for the consulting services, we pay Dr. Narayan \$12,000 per month. The consulting agreement was amended effective January 11, 2022 to extend the initial term by an additional five years, and unless earlier terminated by the parties, the consulting agreement terminates on January 11, 2027. Either party may terminate the consulting agreement earlier upon 30 days prior written notice. The consulting agreement will terminate automatically upon the death of Dr. Narayan or in the event of his disability that prevents him from performing the consulting services under the agreement. We paid consulting fees to Bioplastic Polymers LLC, which is owned by Ramani Narayan, Ph.D., in the aggregate amount of \$144,000 during the fiscal year ended August 31, 2023.

EXECUTIVE COMPENSATION

Compensation Review

In this Compensation Review, we describe the key principles and approaches we use to determine elements of compensation paid to, awarded to and earned by G. Patrick Lynch, who serves as our President and Chief Executive Officer (referred to as our "CEO"), and Matthew C. Wolsfeld, who serves as our Chief Financial Officer (referred to as our "CFO"). Their compensation is set forth in the Summary Compensation Table found later in this proxy statement. The CEO and CFO are the only two individuals who have been designated by our Board of Directors as "executive officers" of NTIC within the meaning of the federal securities laws. This Compensation Review should be read in conjunction with the accompanying compensation tables, corresponding notes and narrative discussion, as they provide additional information and context to our compensation disclosures. We refer to the CEO and CFO in this proxy statement as our "named executive officers" or "executives."

When reading this Compensation Review, please note that we are a "smaller reporting company" under the federal securities laws and are not required to provide a "Compensation Discussion and Analysis" of the type required by Item 402 of Regulation S-K. This Compensation Review is intended to supplement the SEC-required disclosure, which is included below this section, and it is not a Compensation Discussion and Analysis.

Executive Summary

One of our key executive compensation objectives is to link pay to performance by aligning the financial interests of our executives with those of our stockholders and by emphasizing pay for performance in our compensation programs. We believe we accomplish this objective primarily through our annual bonus plan, which compensates executives for achieving annual corporate financial goals and individual goals.

Our fiscal 2023 total net sales increased 7.7% to \$79,902,952 compared to fiscal 2022 and NTIC incurred net income attributable to NTIC of \$2,912,276, or \$0.30 per diluted common share, for fiscal 2023 compared to net income attributable to NTIC of \$6,324,700, or \$0.66 per diluted common share, for fiscal 2022.

Compensation Highlights and Best Practices

Our compensation practices include many best pay practices that support our executive compensation objectives and principles and benefit our stockholders, such as the following:

- *Pay for performance*. We tie compensation directly to financial performance. Our annual bonus plan pays out only if a certain minimum adjusted earnings threshold is met, and the payouts are completely dependent upon our actual adjusted earnings.
- *At-risk pay.* A significant portion of executives' compensation is "performance-based" or "at risk." For fiscal 2023, approximately 43.0% of total compensation for our named executive officers was performance-based, assuming grant date fair values for equity awards.
- *Equity-based pay.* A significant portion of executives' compensation is "equity-based" and in the form of stock-based incentive awards. For fiscal 2023, approximately 26.0% of total compensation for our named executive officers was equity-based, assuming grant date fair values for equity awards.

- *Clawback policy*. Our stock incentive plan and related award agreements include a "clawback" mechanism to recoup incentive compensation if it is determined that executives engaged in certain conduct adverse to our interests. In addition, in August 2018, we adopted a clawback policy pursuant to which we may recover certain incentive compensation from current or former executive officers in the event a financial metric used to determine the vesting or payment of incentive compensation to an executive was calculated incorrectly or the executive engaged in egregious conduct that is substantially detrimental to NTIC. Effective as of October 2, 2023, we revised this clawback policy to comply with the mandatory recovery of erroneously paid compensation rules of the Nasdaq Stock Market.
- *No tax gross-ups*. We do not provide any tax "gross-up" payments in connection with any compensation, benefits or perquisites provided to our executives.
- *Limited perquisites*. We provide only limited perquisites to our executives.
- *Stock ownership guidelines*. We maintain stock ownership guidelines that allow us to ensure that the interests of our executive officers are closely aligned with those of our stockholders.
- *No hedging or pledging.* We prohibit our executives from engaging in hedging transactions, such as short sales, transactions in publicly traded options, such as puts, calls and other derivatives, and pledging our common stock in any significant respect.

Say-on-Pay Vote

At our 2023 Annual Meeting of Stockholders, our stockholders had the opportunity to provide an advisory vote on the compensation paid to our named executive officers, or a "say-on-pay" vote. Of the votes cast by our stockholders, approximately 92% were in favor of our "say-on-pay" proposal. Accordingly, the Compensation Committee generally believes that these results affirmed stockholder support of our approach to executive compensation and did not believe it was necessary to make, and therefore has not made, any changes to our executive pay program solely in response to that vote. In accordance with the result of the advisory vote on the frequency of the say-on-pay vote, which was conducted at our 2020 Annual Meeting of Stockholders, our Board of Directors has determined that we will conduct an executive compensation advisory vote every year. Accordingly, the next say-on-pay vote will occur at our 2024 Annual Meeting of Stockholders. Our next vote on the frequency of the say-on-pay vote will occur at our 2026 Annual Meeting of Stockholders.

Executive Compensation Objectives

Our guiding compensation philosophy is to maintain an executive compensation program that allows us to attract, retain, motivate and reward qualified and talented executives that will enable us to grow our business, achieve our annual, long-term and strategic goals and drive long-term stockholder value.

The following core principles provide a framework for our executive compensation program:

- Align interests of our executives with stockholder interests;
- Integrate compensation with our business plans and strategic goals;
- Link amount of compensation to both company and individual performance; and
- Provide fair and competitive compensation opportunities that attract and retain executives.

How We Make Compensation Decisions

There are several elements to our executive compensation decision-making, which we believe allow us to most effectively implement our compensation philosophy. Each of these elements and their roles are described briefly below.

Role of the Compensation Committee. The Compensation Committee, which is comprised solely of independent directors, oversees our executive compensation program. Within its duties, the Compensation Committee recommends compensation for the CEO and CFO. In doing so, the Compensation Committee:

- Approves and recommends that the Board approve the total executive compensation package for each executive, including his base salary, annual bonus payout and annual stock option awards;
- Approves and recommends that the Board approve the terms of our annual bonus plan;
- Approves and recommends that the Board approve annual stock option grants;
- Evaluates market competitiveness of our executive compensation program; and
- Evaluates proposed significant changes to all other elements of our executive compensation program.

In setting or recommending executive compensation for our executives, the Compensation Committee considers the following primary factors:

- each executive's position within NTIC and the level of responsibility;
- the ability of the executive to impact key business initiatives;
- the executive's individual experience and qualifications;
- company performance, as compared to specific pre-established objectives;
- individual performance, generally and as compared to specific pre-established objectives;
- the executive's current and historical compensation levels;
- advancement potential and succession planning considerations;
- an assessment of the risk that the executive would leave NTIC and the harm to our business initiatives if the executive left;
- the retention value of executive equity holdings, including outstanding stock options;
- the dilutive effect on the interests of our stockholders of long-term equity-based incentive awards; and
- anticipated share-based compensation expense as determined under applicable accounting rules.

The Compensation Committee also considers the recommendations of the CEO with respect to executive compensation to be paid to other executives and employees. The significance of any individual factor described above in setting executive compensation will vary from year to year and may vary among our executives. In making its final decision regarding the form and amount of compensation to be paid to our named executive officers (other than the CEO), the Compensation Committee considers and gives great

weight to the recommendations of the CEO recognizing that due to his reporting and otherwise close relationship with each executive and employee, the CEO often is in a better position than the Compensation Committee to evaluate the performance of each executive (other than himself). In making its final decision regarding the form and amount of compensation to be paid to the CEO, the Compensation Committee considers the results of the CEO's self-review and his individual annual performance review by the Compensation Committee and the recommendations of our non-employee directors. The CEO's compensation is approved by the Board of Directors (with the CEO abstaining), upon recommendation of the Compensation Committee.

Role of Management. Management's role is to provide current compensation information to the Compensation Committee and provide analysis and recommendations on executive compensation to the Compensation Committee based on the executive's level of professional experience; the executive's duties and responsibilities; individual performance; tenure; and historic corporate performance. None of our executives, including the CEO, provides input or recommendations with respect to his own compensation.

Use of Market Data. Since there are no public companies of which NTIC is aware that are substantially similar to NTIC, in terms of its business, industry and corporate profile, the Compensation Committee has not used market data to review and evaluate executive compensation in any material respect. However, the Compensation Committee has historically used a group of peer companies with a market capitalization similar to NTIC and either in a similar industry or located in Minnesota.

Elements of Our Executive Compensation Program

Our executive compensation program for the fiscal year ended August 31, 2023 consisted of the following key elements:

- Base salary;
- Annual incentive compensation;
- Long-term equity-based incentive compensation, in the form of stock options; and
- All other compensation, including health and welfare benefits, retirement plans and perquisites.

The table below provides some of the key characteristics of and purpose for each element along with some key actions taken during fiscal 2023.

Element	Key Characteristics	Purpose	Key Fiscal 2023 Actions
Base Salary	A fixed amount, paid in cash and reviewed annually and, if appropriate, adjusted.	Provide a source of fixed income that is competitive and reflects scope and responsibility of the position held.	Our named executive officers received a 5.0% increase to their fiscal 2022 annual base salaries.
Annual Incentive	of compensation that is	Motivate and reward our executives for achievement of annual business results intended to drive overall company performance.	Messrs. Lynch and Wolsfeld received bonuses in the amount of \$382,207 and \$282,502, respectively, in each case representing 77.4% of their annual base salary. A portion of the annual incentive earned for fiscal 2023 was paid in the form of a stock option grant made at the beginning of fiscal 2023, resulting in cash bonuses of \$151,752 for Mr. Lynch and \$112,165 for Mr. Wolsfeld.

Element	Key Characteristics	Purpose	Key Fiscal 2023 Actions
Long-Term Equity-Based Incentive	A variable, long-term element	Align the interests of our executives with the long-term interests of our stockholders; promote stock ownership and create significant incentives for executive retention.	No significant changes were made. The fiscal 2023 stock option grant was intended as partial payout of the fiscal 2023 annual bonus program.
Health and Welfare Benefits	Includes health, dental and life insurance.	Provide competitive health and welfare benefits at a reasonable cost and promote employee health.	No significant changes were made.
Retirement Plans	Includes a 401(k) plan. We do not provide pension arrangements or post- retirement health coverage for our executives or employees. We also do not provide any nonqualified defined contribution or other deferred compensation plans.	Provide an opportunity for employees to save and prepare financially for retirement.	No significant changes were made.
Perquisites	Includes use of a company- owned automobile. We do not provide any other perquisites to our executives.	Assist in the attraction and retention of executives.	No significant changes were made.

We describe each key element of our executive compensation program in more detail in the following pages, along with the compensation decisions made in fiscal 2023.

Base Salary. We provide a base salary for our named executive officers, which, unlike some of the other elements of our executive compensation program, is not subject to company or individual performance risk. We recognize the need for most executives to receive at least a portion of their total compensation in the form of a guaranteed base salary that is paid in cash regularly throughout the year.

We initially fix base salaries for our executives at a level that we believe enables us to hire and retain them in a competitive environment and to reward satisfactory individual performance and a satisfactory level of contribution to our overall business objectives. The Compensation Committee reviews base salaries for our named executive officers each year typically in August and generally recommends to the Board of Directors any increases for the following fiscal year in August. Any increases in base salaries are effective as of September 1.

The Compensation Committee's recommendations to the Board of Directors regarding the base salaries of our named executive officers are based on a number of factors, including: the executive's level of responsibility, prior experience and base salary for the prior year, the skills and experiences required by the position, length of service with NTIC, past individual performance, cost of living increases and other considerations the Compensation Committee deems relevant. The Compensation Committee also recognizes that in addition to the typical responsibilities and duties held by our executives, by virtue of their positions, our executives, due to the small number of our executives and employees, often possess additional responsibilities and perform additional duties that would be typically delegated to others in most organizations with additional personnel and resources.

Annualized base salary rates for fiscal 2022 and fiscal 2023 for our named executive officers were as follows:

Name	Fiscal 2022	Fiscal 2023	% Change From Fiscal 2022
G. Patrick Lynch	\$ 470,224	\$ 493,735	5.0%
Matthew C. Wolsfeld	347,557	364,935	5.0%

The Board of Directors, upon recommendation of the Compensation Committee, recently set base salaries for fiscal 2023. Both Mr. Lynch's and Mr. Wolsfeld's base salaries for fiscal 2023 increased by 5.0% of their respective base salaries for fiscal 2022.

Annual Incentive Compensation. In addition to base compensation, we provide our named executive officers the opportunity to earn annual incentive compensation based on the achievement of certain company and individual related performance goals. Our annual bonus program, along with our stock ownership guidelines, directly aligns the interests of our executive officers and stockholders by providing an incentive for the achievement of key corporate and individual performance measures that are critical to the success of NTIC and linking a significant portion of each executive's annual compensation to the achievement of such measures.

Under the annual bonus plan for fiscal 2023, the total amount available under the bonus plan for all plan participants, including our two executive officers, as in past years, was a percent (25%) of NTIC's earnings before interest, taxes and other income, as adjusted to take into account amounts to be paid under the bonus plan and certain other adjustments (referred to as "Adjusted EBITOI"). For fiscal 2023, the other adjustments included amounts paid under NTIC's sales and management bonus plan and profit sharing plan and a portion of stock-based compensation expense. As in past years, for fiscal 2023, for each named executive officer participant, 75% of the amount of their individual bonus payout was determined based upon their individual allocation percentage of the total amount available under the bonus plan, and 25% of their individual payout was determined based upon their achievement of certain pre-established but more qualitative individual performance objectives.

A plan participant's individual allocation percentage of the total amount available under the bonus plan was based on the number of plan participants (which for fiscal 2023 was seven participants), the individual's annual base salary for fiscal 2023 and the individual's position and level of responsibility within NTIC. Individual allocation percentages ranged from approximately 6% to 23%. Mr. Lynch's individual allocation percentage for fiscal 2023 was approximately 23% and Mr. Wolsfeld's individual allocation percentage for fiscal 2023 was approximately 17% of a total management bonus pool of approximately \$663,482.

Mr. Lynch's individual performance objectives for fiscal 2023 related primarily to NTIC's infrastructure backbone and enterprise software platform, oversight of oil and gas sales and marketing, management of pending litigation, improvement and maintenance of key joint venture relationships, improvement and maintenance of investors relations and retention and improvement of key personnel. Mr. Wolsfeld's individual performance objectives for fiscal 2023 related primarily to investor relations, subsidiary profitability, subsidiary cash flow and management of NTIC's information technology department. In the case of both Mr. Lynch and Mr. Wolsfeld, the Compensation Committee determined each executive achieved his individual performance objectives at a 100% achievement level.

Mr. Lynch received a total cash bonus of \$151,752 for fiscal 2023 and Mr. Wolsfeld received a total bonus of \$112,165 for fiscal 2023. Additionally, a portion of the annual bonus earned was paid in the form of a stock option grant on September 1, 2022.

The structure and material terms of our annual bonus plan for fiscal 2024 are similar to the annual bonus plan for fiscal 2023. As in past years, the payment of bonuses under the plan for fiscal 2024 will be discretionary and may be paid to participants in cash and/or shares of NTIC common stock.

Long-Term Equity-Based Incentive Compensation. The long-term equity-based incentive compensation component of our executive compensation program consists of annual option grants to our executives and certain other employees. The stock options are typically granted on the first business day of each fiscal year.

Accordingly, on September 1, 2022, NTIC granted Mr. Lynch an option to purchase 47,517 shares of common stock and Mr. Wolsfeld an option to purchase 35,121 shares of common stock. In response to stockholder concerns, these options vest annually over three years, as opposed to vesting in full on the first anniversary of the date of grant. More recently, on September 1, 2023, NTIC granted Mr. Lynch an option to purchase 45,381 shares of common stock and Mr. Wolsfeld an option to purchase 33,543 shares of common stock. These stock options vest annually over three years.

In determining the number of stock options to grant to our executives and other employees, the Board of Directors, upon recommendation of the Compensation Committee, considered the anticipated amount to be earned under the annual bonus plan and a portion of which it preferred to pay out in the form of a stock option grant and the total amount of stock-based compensation expense budgeted for such options and divided that amount by the grant date fair value per share to obtain a total option pool. Of the total option pool, the number of options to be granted to each executive and employee receiving options was then determined based on the individual's base salary as a percentage of the total aggregate base salaries of all executive and employees receiving option grants.

The Compensation Committee's primary objectives with respect to long-term equity-based incentive compensation, along with our stock ownership guidelines, are to align the interests of our executives with the long-term interests of our stockholders, promote stock ownership and create significant incentives for executive retention. Long-term equity-based incentives are intended to comprise a significant portion of each executive's compensation package, consistent with our executive compensation objective to align the interests of our executives with the interests of our stockholders. For fiscal 2023, equity-based compensation comprised approximately 26% of the total compensation for Mr. Lynch and Mr. Wolsfeld, assuming grant date fair value for equity awards. All equity-based compensation granted to our executives is granted under our then current stockholder-approved stock incentive plan.

The Compensation Committee uses stock options as opposed to other equity-based incentive awards since the Compensation Committee believes that options effectively incentivize executives to maximize company performance, as the value of awards is directly tied to an appreciation in the value of our common stock. Stock options also provide an effective retention mechanism because of vesting provisions. An important objective of our long-term equity-based incentive program is to strengthen the relationship between the long-term value of our common stock and the potential financial gain for our executives. Stock options provide recipients with the opportunity to purchase our common stock at a price fixed on the grant date regardless of future market price. The vesting of our stock options is timebased – over three years and previously upon the one-year anniversary of the date of grant. Our policy is to grant options only with an exercise price equal to or more than the fair market value of our common stock on the grant date. Under the terms of our incentive plan, fair market value is defined as the mean between the reported high and low sale prices of our common stock as of the grant date at the end of the regular trading session, as reported on the Nasdaq Global Market. Because stock options become valuable only if the share price increases above the exercise price and the option holder remains employed during the period required for the option to vest, they provide an incentive for an executive to remain employed. In addition, stock options link a portion of an employee's compensation to the interests of our stockholders by providing an incentive to achieve corporate goals and increase the market price of our common stock over the vesting period.

Through the grant of stock options, we seek to align the long-term interests of our executives with the long-term interests of our stockholders by creating a strong and direct link between compensation and long-term stockholder return. When our executives deliver returns to our stockholders, in the form of increases in our stock price or otherwise, stock options permit an increase in their compensation. We also believe that stock options enable our executives to achieve meaningful equity ownership in NTIC and enable us to attract, retain and motivate our executives by maintaining competitive levels of total compensation.

As described in more detail below, in November 2021, the Board of Directors adopted stock ownership guidelines to align the interests of our executives with the interests of our stockholders, and under the terms of our insider trading policy, our executives are prohibited from engaging in any hedging or significant pledging of their shares of our common stock.

All Other Compensation. It is generally our policy not to extend significant perquisites to our executives that are not available to our employees generally. The only significant perquisite that we provide to our executives is the personal use of a company-owned vehicle. Our executives also receive benefits, which are also received by our other employees, including participation in the Northern Technologies International Corporation 401(k) Plan and health, dental and life insurance benefits. Under the 401(k) plan, all eligible participants, including our executives, may voluntarily request that we reduce his or her pre-tax compensation by up to 10% (subject to certain special limitations) and contribute such amounts to a trust. We typically contribute an amount equal to 50% of the first 7% of the amount that each participant contributed under this plan. We do not provide pension arrangements or post-retirement health coverage for our executives or employees. We also do not provide any nonqualified defined contribution or other deferred compensation plans.

Change in Control and Post-Termination Severance Arrangements

Change in Control Arrangements. To encourage continuity, stability and retention when considering the potential disruptive impact of an actual or potential corporate transaction, we have established change in control arrangements, including provisions in our stock incentive plans and written employment agreements with our executives. These arrangements are designed to incentivize our executives to remain with NTIC in the event of a change in control or a potential change in control.

Under the terms of our stock incentive plans and the individual award documents provided to recipients of awards under those plans, all stock options become immediately vested and exercisable upon the completion of a change in control of NTIC. For more information, see "*—Potential Payments Upon Termination or Change in Control—Change in Control Arrangements.*" Thus, the immediate vesting of stock options is triggered by the change in control, itself, and thus is known as a "single trigger" change in control arrangement. We believe these "single trigger" equity acceleration change in control arrangements provide important retention incentives during what can often be an uncertain time for executives. They also provide executives with additional monetary motivation to focus on and complete a transaction that the Board of Directors believes is in the best interests of our stockholders rather than to seek new employment opportunities. If an executive were to leave before the completion of the change in control, non-vested options held by the executive would terminate.

In addition, we have entered into employment agreements with our named executive officers to provide certain payments and benefits in the event of a change in control, which are payable only in the event

their employment is terminated in connection with the change in control ("double-trigger" provisions). These change in control protections provide consideration to executives for certain restrictive covenants that apply following termination of employment and provide continuity of management in connection with a threatened or actual change in control transaction. If an executive's employment is terminated without "cause" or by the executive for "good reason" (as defined in the employment agreements) within 24 months following a change in control, the executive will be entitled to receive a lump sum payment equal to two times, in the case of the CEO, and one and one-half times, in the case of the CFO, his average total annual compensation for the two most recently completed fiscal years. The average total annual compensation will be determined based on the calculation used to determine total compensation in the Summary Compensation Table. Accordingly, it will not include equity gains; only, the grant date fair value of equity grants. Additionally, each of the CEO and CFO is eligible to receive a pro rata portion of the target bonus that the executive otherwise would have been eligible to receive under our bonus plan for the fiscal year during which the executive's employment is terminated, with such pro rata portion based on the number of completed months during the fiscal year that the executive was employed with NTIC. These arrangements, and a quantification of the payment and benefits provided under these arrangements. are described in more detail under "-Potential Payments Upon Termination or Change in Control-Change in Control Arrangements." Other than the immediate acceleration of equity-based awards, which we believe aligns our executives' interests with those of our stockholders by allowing executives to participate fully in the benefits of a change in control as to all of their equity, in order for a named executive officer to receive any other payments or benefits as a result of a change in control of NTIC, there must be a termination of the executive's employment, either by us without cause or by the executive for good reason. The termination of the executive's employment by the executive without good reason will not give rise to additional payments or benefits either in a change in control situation or otherwise. Thus, these additional payments and benefits will not just be triggered by a change in control, but also will require a termination event not within the control of the executive, and thus are known as "double trigger" change in control arrangements. As opposed to the immediate acceleration of stock options, we believe that other change in control payments and benefits should properly be tied to termination following a change in control, given the intent that these amounts provide economic security to ease the executive's transition into new employment.

We believe these change in control arrangements are an important part of our executive compensation program in part because they mitigate some of the risk for executives working in a smaller company where there is a meaningful risk that NTIC may be acquired. Change in control benefits are intended to attract and retain qualified executives who, absent these arrangements and in anticipation of a possible change in control of NTIC, might consider seeking employment alternatives to be less risky than remaining with NTIC through the transaction. We believe that relative to NTIC's overall value, our potential change in control benefits are relatively small. We also believe that the form and amount of these change in control benefits are fair and reasonable to both NTIC and our executives. The Compensation Committee reviews our change of control arrangements periodically to ensure that they remain necessary and appropriate.

Other Severance Arrangements. Each of our named executive officers is entitled to receive severance benefits upon certain other qualifying terminations of employment, other than a change in control, pursuant to the provisions of such executive's employment agreement. These severance arrangements are primarily intended to retain our executives and provide consideration to those executives for certain restrictive covenants that apply following termination of employment. Additionally, we entered into the employment agreements because they provide us valuable protection by subjecting the executives to restrictive covenants that prohibit the disclosure of confidential information during and following their employment and limit their ability to engage in competition with us or otherwise interfere with our business relationships following their termination of employment. For more information on our employment agreements and severance arrangements with our named executive officers, see the

discussions below under "—Summary Compensation—Employment Agreements" and "—Potential Payments Upon a Termination or Change in Control."

We believe that the form and amount of these severance benefits are fair and reasonable to both NTIC and our executives. The Compensation Committee reviews our severance arrangements periodically to ensure that they remain necessary and appropriate.

Stock Ownership Guidelines

In November 2021, the Board of Directors adopted stock ownership guidelines that are intended to align the interests of our executive officers with those of our stockholders. As of the date of this proxy statement, each of our executive officers required to meet the stock ownership guidelines had met such guideline. The stock ownership guidelines for our executive officers are as follows:

Position	Guideline
Chief Executive Officer	6x annual base salary
Other Executive Officers	3x annual base salary

Hedging and Pledging Policies

Our insider trading policy prohibits NTIC directors, officers, employees, consultants and their immediate family members, other household members and controlled entities from engaging in hedging or monetization transactions that hedge or offset, or are designed to hedge or offset, any decrease in the market value of NTIC securities, including, without limitation, prepaid variable forward contracts, equity swaps, collars and exchange funds. In addition, our insider trading policy limits the ability of the individuals listed above to pledge NTIC securities. NTIC securities may only be pledged in an insignificant manner if the individual has a compelling reason for the pledge and is able to demonstrate the financial capacity to repay the loan without resort to the pledged securities. The proposed transaction must be submitted at least two weeks prior to its proposed execution in order for the Chief Financial Officer to review and approve the transaction.

Clawback Policy

We have a clawback policy pursuant to which we may recover certain incentive compensation from current or former executive officers in the event a financial metric used to determine the vesting or payment of incentive compensation to an executive was calculated incorrectly or the executive engaged in egregious conduct that is substantially detrimental to NTIC. Effective as of October 2, 2023, we revised this clawback policy to comply with the mandatory recovery of erroneously paid compensation rules of the Nasdaq Stock Market.

Summary of Cash and Other Compensation

The table below provides summary information concerning all compensation awarded to, earned by or paid to named executive officers. G. Patrick Lynch, our President and Chief Executive Officer, serves as our principal executive officer, and Matthew C. Wolsfeld, our Chief Financial Officer and Corporate Secretary, serves as our principal financial officer. Mr. Lynch and Mr. Wolsfeld are the only two individuals who have been designated by our Board of Directors as "executive officers" of NTIC.

				Γ	Non-Equity			
Name and Principal Position	Fiscal Year	Salary	Option Awards ⁽¹⁾		centive Plan mpensation ⁽²⁾	All Other npensation ⁽³⁾	_	Total
G. Patrick Lynch President and Chief Executive Officer	2023 2022	\$ 493,735 470,224	\$ 230,455 237,217	\$	151,752 169,310	\$ 13,102 13,102	\$	889,044 889,853
Matthew C. Wolsfeld Chief Financial Officer and Corporate Secretary	2023 2022	364,935 347,557	170,337 175,334		112,165 125,142	12,875 12,875		660,312 660,908

SUMMARY COMPENSATION TABLE – FISCAL 2023

- (1) On September 1, 2022, each of the named executive officers was granted a stock option under the Northern Technologies International Corporation 2019 Stock Incentive Plan. We refer you to the information under the heading "Compensation Review—Elements of Our Executive Compensation Program—Long-Term Equity-Based Incentive Compensation" for a discussion of the option grants and their terms. The amounts reflected in the column entitled "Option Awards" for each officer represent the aggregate grant date fair value for the option awards, as computed in accordance with FASB ASC Topic 718. The grant date fair value is determined based on a Black-Scholes option pricing model. The grant date fair value per share for the options granted on September 1, 2022 was \$4.85 and was determined using the following specific assumptions: risk free interest rate: 3.30%; expected life: 10.0 years; expected volatility: 45.2%; and expected dividend yield: 0%.
- (2) The amounts reflected in the column entitled "Non-Equity Incentive Plan Compensation" reflect the cash amount of bonus earned by each of the officers in consideration for their fiscal 2023 and 2022 performance, respectively, but paid to such officers during fiscal 2024 and 2023, respectively. We refer you to the information under "*Compensation Review*—*Elements of Our Executive Compensation Program*—*Annual Incentive Compensation*" for a discussion of the factors taken into consideration by the Board of Directors, upon recommendation of the Compensation Committee, in determining the amount of bonus paid to each named executive officer.
- (3) The amounts shown in the column entitled "All Other Compensation" for fiscal 2023 include the following with respect to each named executive officer:

Name	401	1(k) Match	ersonal Use of Auto
G. Patrick Lynch	\$	8,750	\$ 4,352
Matthew C. Wolsfeld		8,750	4,125

Outstanding Equity Awards at Fiscal Year End

The table set forth below provides information regarding stock options for each of our named executive officers that remained outstanding at August 31, 2023. Note that because of the grant date, the table set forth below does not reflect option grants on September 1, 2023. We did not have any equity incentive plan awards or stock awards outstanding at August 31, 2023. Share and per share data have been adjusted to reflect our two-for-one stock split that was effective June 28, 2019.

		Option Awards		
Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable ⁽¹⁾	Option Exercise Price (\$)	Option Expiration Date
G. Patrick Lynch	10,488	0	10.05	08/31/2024
·	14,574	0	7.43	08/31/2025
	16,072	0	6.70	08/31/2026
	11,704	0	9.18	08/31/2027
	27,596	0	18.23	08/31/2028
	58,651	0	10.80	08/31/2029
	49,828	24,914 ⁽²⁾	8.24	08/31/2030
	10,847	21,693 ⁽³⁾	16.97	08/31/2031
	0	47,517 ⁽⁴⁾	11.38	08/31/2032
Matthew C. Wolsfeld	7,752	0	10.05	08/31/2024
	10,772	0	7.43	08/31/2025
	11,880	0	6.70	08/31/2026
	8,650	0	9.18	08/31/2027
	20,396	0	18.23	08/31/2028
	43,351	0	10.80	08/31/2029
	36,830	18,414 ⁽²⁾	8.24	08/31/2030
	8,017	16,034 ⁽³⁾	16.97	08/31/2031
	0	35,121 ⁽⁴⁾	11.38	08/31/2032

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR END—FISCAL 2023

- (1) All options described in this table were granted under the Northern Technologies International Corporation 2019 Stock Incentive Plan or the Northern Technologies International Corporation Amended and Restated 2007 Stock Incentive Plan. Under these plans, upon the occurrence of a change in control, the unvested and unexercisable options will be accelerated and become fully vested and immediately exercisable as of the date of the change in control. For more information, we refer you to the discussion below under "— *Stock Incentive Plans.*"
- (2) These options vest over a three-year period, with one-third of the underlying shares vesting on each of September 1, 2021, 2022 and 2023 so long as the individual remains an employee of NTIC as of such date.
- (3) These options vest over a three-year period, with one-third of the underlying shares vesting on each of September 1, 2022, 2023 and 2024 so long as the individual remains an employee of NTIC as of such date.
- (4) These options vest over a three-year period, with one-third of the underlying shares vesting on each of September 1, 2023, 2024 and 2025 so long as the individual remains an employee of NTIC as of such date.

Option Exercises for Fiscal 2023

The following table summarizes all of the stock options exercised during fiscal 2023:

	Option Awa	rds ⁽¹⁾
Name	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)
G. Patrick Lynch	36,284	320,553
	11,610	69,776
Matthew C. Wolsfeld	27,218	236,933
	8,582	51,578

(1) The number of shares acquired upon exercise reflects the gross number of shares acquired absent any netting for shares surrendered to pay the option exercise price and/or satisfy tax withholding requirements. The value realized on exercise represents the gross number of shares acquired on exercise multiplied by the market price of our common stock on the exercise date, less the per share exercise price.

Stock Incentive Plans

We have two stock incentive plans under which stock options are currently outstanding: the Northern Technologies International Corporation Amended and Restated 2019 Stock Incentive Plan and the Northern Technologies International Corporation Amended and Restated 2007 Stock Incentive Plan. However, future stock incentive awards may only be granted under the Northern Technologies International Corporation Amended and Restated 2019 Stock Incentive Plan. However, future stock incentive awards may only be granted under the Northern Technologies International Corporation Amended and Restated 2019 Stock Incentive Plan. Under the terms of the 2019 plan, our named executive officers, in addition to other employees and individuals, are eligible to receive stock-based compensation awards, such as stock options, stock appreciation rights, restricted stock awards, restricted stock units, performance awards, and other stock-based awards. To date, only incentive and non-statutory stock options have been granted under the plan. The plan contains both an overall limit on the number of shares of our common stock that may be issued, as well as individual limits for non-employee directors and other grant limits.

Incentive stock options must be granted with a per share exercise price equal to at least the fair market value of a share of our common stock on the date of grant. For the purposes of the plan, the fair market value of our common stock is the mean between the reported high and low sale price of our common stock, as reported by the Nasdaq Global Market. We generally set the per share exercise price of all stock options granted under the plan at an amount equal to the fair market value of a share of our common stock on the date of grant.

Except in connection with certain specified changes in our corporate structure or shares, the Board of Directors or Compensation Committee may not, without prior approval of our stockholders, seek to effect any re-pricing of any previously granted, "underwater" option or stock appreciation right by amending or modifying the terms of the underwater option or stock appreciation right to lower the exercise price, cancelling the underwater option or stock appreciation right in exchange for cash, replacement options or stock appreciation rights having a lower exercise price, or other incentive awards, or repurchasing the underwater options or stock appreciation right is deemed to be "underwater" at any time when the fair market value of our common stock is less than the exercise price.

We generally provide for the vesting of stock options in equal annual installments over a three-year period commencing on the one-year anniversary of the date of grant for employees and in full on the one-year anniversary of the date of grant for directors. We generally provide option terms of ten years.

Optionees may pay the exercise price of stock options in cash, except that the Compensation Committee may allow payment to be made (in whole or in part) by (1) using a broker-assisted cashless exercise procedure pursuant to which the optionee, upon exercise of an option, irrevocably instructs a broker or dealer to sell a sufficient number of shares of our common stock or loan a sufficient amount of money to pay all or a portion of the exercise price of the option and/or any related withholding tax obligations and remit such sums to us and directs us to deliver stock certificates to be issued upon such exercise directly to such broker or dealer; or (2) using a cashless exercise procedure pursuant to which the optionee surrenders to us shares of our common stock either underlying the option or that are otherwise held by the optionee.

Under the terms of the plan, unless otherwise provided in a separate agreement or amended in connection with an optionee's termination of employment, if a named executive officer's employment or service with NTIC terminates for any reason, the unvested portion of the options held by such officer will immediately terminate, and the executive's right to exercise the then vested portion of the options will:

- immediately terminate if the executive's employment or service relationship with NTIC terminates for "cause";
- continue for a period of 12 months if the executive's employment or service relationship with NTIC terminates as a result of the executive's death, disability or retirement; or
- continue for a period of three months if the executive's employment or service relationship with NTIC terminates for any reason, other than for cause or upon death, disability or retirement.

As set forth in the plan, the term "cause" is as defined in any employment or other agreement or policy applicable to the named executive officer or, if no such agreement or policy exists, means (i) dishonesty, fraud, misrepresentation, embezzlement or other act of dishonesty with respect to us or any subsidiary, (ii) any unlawful or criminal activity of a serious nature, (iii) any intentional and deliberate breach of a duty or duties that, individually or in the aggregate, are material in relation to the overall duties, or (iv) any material breach of any employment, service, confidentiality or non-compete agreement entered into with us or any subsidiary.

Under the terms of the plan, if a participant is determined by the committee to have taken any action that would constitute "cause" or an "adverse action" during or within one year after the termination of the participant's employment or other service with NTIC, all rights of the participant under the plan and any incentive award agreements then held by the participant will terminate and be forfeited without notice of any kind, and the committee may rescind the exercise, vesting or issuance of, or payment in respect of, any incentive awards of the participant that were exercised, vested or issued, or as to which such payment was made, and require the participant to pay any amount received or the amount of any gain realized as a result of such rescinded exercise, vesting, issuance or payment. Additionally, as applicable, we may defer the exercise of any option or stock appreciation right for a period of up to six months after receipt of a participant's written notice of exercise or the issuance of share certificates upon the vesting of any incentive award for a period of up to six months after the date of such vesting in order for the committee to make any determination as to the existence of cause or an adverse action. An "adverse action" includes any of the following actions or conduct that the committee determines to be injurious, detrimental, prejudicial or adverse to our interests: (i) disclosing any confidential information of NTIC or any subsidiary to any person not authorized to receive it; (ii) engaging, directly or indirectly, in any commercial activity that in the judgment of the committee competes with our business or the business of any of our subsidiaries; or (iii) interfering with our relationships or the relationships of our subsidiaries and our and their respective employees, independent contractors, customers, prospective customers and vendors.

As described in more detail under "*—Post-Termination Severance and Change in Control Arrangements*" if there is a change in control of NTIC, then, under the terms of agreements evidencing options granted to our named executive officers and other employees under the plan, all outstanding options will become immediately exercisable in full and will remain exercisable for the remainder of their terms, regardless of whether the executive to whom such options have been granted remains in the employ or service of us or any of our subsidiaries.

Post-Termination Severance and Change in Control Arrangements

We have entered into employment agreements with G. Patrick Lynch, NTIC's President and Chief Executive Officer, and Matthew C. Wolsfeld, NTIC's Chief Financial Officer and Corporate Secretary. Although each executive's employment with NTIC remains "at will," the employment agreements provide each executive with certain severance benefits in the event the executive's employment is terminated by us without "cause" or by the executive for "good reason" and the executive executes and does not revoke a separation agreement and a release of all claims.

If an executive's employment is terminated by us without "cause" or by the executive for "good reason," in addition to any accrued but unpaid salary and benefits through the date of termination, the executive will be entitled to a severance cash payment from us in an amount equal to two times (one and one-half times, in the case of Mr. Wolsfeld) the executive's average total annual compensation for the two most recently completed fiscal years. The average total annual compensation will be determined based on the calculation used to determine total compensation in the Summary Compensation Table. Accordingly, it will not include equity gains; only, the grant date fair value of equity grants. Additionally, the CEO and CFO are eligible to receive a pro rata portion of the target bonus that the executive otherwise would have been eligible to receive under our bonus plan for the fiscal year during which the executive's employment is terminated, with such pro rata portion based on the number of complete months during the fiscal year that the executive was employed with NTIC. The severance payment will be paid in several installments in the form of salary continuation in accordance with our normal payroll practices over a 24-month period (18 month period, in the case of Mr. Wolsfeld). If, however, the termination event occurs within 24 months after a change in control of NTIC, the severance payment will be paid in one lump sum. If the executive is eligible for and timely elects continued coverage under our group medical plan, group dental plan and/or group vision plan pursuant to Section 4980B of the Internal Revenue Code of 1986, as amended (referred to as "COBRA"), for each of the first 18 months of the COBRA continuation period, we also will reimburse the executive in an amount equal to the difference between the amount the executive pays for such COBRA continuation coverage each month and the amount paid by a full-time active employee each month for the same level of coverage elected by the executive. In addition, all outstanding and unvested options to purchase shares of our common stock and other stock incentive awards granted to the executive under our stock incentive plan will become immediately vested and exercisable.

Under the employment agreements, "cause" is defined as (i) the executive's material breach of any of the executive's obligations under the employment agreement or the executive's willful and continued failure or refusal to perform his duties, responsibilities and obligations as an executive officer of NTIC, for reasons other than the executive's disability, to the satisfaction of the Board of Directors; (ii) the executive's commission of an act of dishonesty, fraud, embezzlement, misappropriation, or intentional and deliberate injury or material breach of fiduciary duty, or material breach of the duty of loyalty related to or against us or our business, or any unlawful or criminal activity of a serious nature involving any felony, or conviction by a court of competent jurisdiction of, or pleading guilty or nolo contendere to, any felony or any crime involving moral turpitude; or (iii) the existence of any court order or settlement agreement prohibiting the executive's continued employment with NTIC.

"Good reason" is defined as (i) a material diminution in the executive's authority, duties or responsibilities; (ii) a material diminution in the executive's annual base salary; (iii) a material change in the geographic location at which we require the executive to provide services, except for travel reasonably required in the performance of the executive's responsibilities; or (iv) any action or inaction that constitutes a material breach by us of the employment agreement.

"Change in control" has the meaning assigned to such term in our stock incentive plan as in effect from time to time to the extent such change in control is a "change of control event" as defined under Code Section 409A and applicable Internal Revenue Service regulations. Under the terms of our stock incentive plan, a "change in control" means:

- the sale, lease, exchange or other transfer of all or substantially all of our assets to a corporation that is not controlled by us;
- the approval by our stockholders of any plan or proposal for our liquidation or dissolution;
- certain merger or business combination transactions;
- more than 40% of our outstanding voting shares are acquired by any person or group of persons who did not own any shares of common stock on the effective date of the plan; and
- certain changes in the composition of our Board of Directors.

If a change in control of NTIC had occurred on August 31, 2023, the number of options indicated in the table below held by each of our named executive officers would have been automatically accelerated and exercisable. The estimated value of the automatic acceleration of the vesting of unvested stock options held by a named executive officer as of August 31, 2023 is also indicated in the table below and is based on the difference between: (i) the market price of the shares of our common stock underlying the unvested stock options held by such officer as of August 31, 2023 (based on the closing sale price of our common stock on the last trading day of fiscal 2023, August 31, 2023 — \$12.90), and (ii) the exercise price of the options.

Executive Officer	Number of Unvested Options Subject to Automatic Acceleration	Estimated Value of Automatic Acceleration of Vesting
G. Patrick Lynch	94,124	\$ 116,099
Matthew C. Wolsfeld	69,569	85,809

If the employment of our named executive officers was terminated as of August 31, 2023, they would have been entitled to the following compensation and benefits, depending upon the applicable triggering event:

				Т	riggering Event				
Executive Officer	Type of Payment	For	ntary/ Cause ination	Involuntary Termination without Cause	Qualifying Change in Control Termination	De	eath	Disa	bility
G. Patrick Lynch	Cash severance ⁽¹⁾	\$	0	\$1,778,897	\$1,778,897	\$	0	\$	0
	Benefits continuation ⁽²⁾		0	29,940	29,940		0		0
	Equity acceleration ⁽³⁾		0	116,099	116,099		0		0
	Total:	\$	0	\$1,924,936	\$1,924,936	\$	0	\$	0
Matthew C. Wolsfeld	Cash severance ⁽¹⁾	\$	0	\$ 990,915	\$ 990,915	\$	0	\$	0
	Benefits continuation ⁽²⁾		0	29,940	29,940		0		0
	Equity acceleration ⁽³⁾		0	85,809	85,809		0		0
	Total:	\$	0	\$1,106,664	\$1,106,664	\$	0	\$	0

- (1) Represents the value of two times (one and one-half times, in the case of Mr. Wolsfeld) the executive's average total annual compensation for the two most recently completed fiscal years. Does not include a pro rata portion of the target bonus that the executive otherwise would have been eligible to receive under our bonus plan for the fiscal year during which the executive's employment is terminated, since in light of the assumed termination date of August 31, 2023, the last day of the fiscal year, such bonus would have been earned.
- (2) Represents the value of medical, dental and vision benefit continuation for each executive and their family for 18 months following the executive's termination.
- (3) Represents the value of acceleration of all unvested shares that are subject to options, based on the difference between the closing sale price of \$12.90 per share as of the last trading day of fiscal 2023, August 31, 2023, and the exercise price.

Pay Versus Performance Disclosure

Pay Versus Performance Table

As required by Section 953(a) of the Dodd-Frank Act and Item 402(v) of SEC Regulation S-K, we are providing the following information about the relationship between "compensation actually paid" to our NEOs, within the meaning of such rules, and certain financial performance measures of our Company. The table below provides information regarding compensation actually paid to our CEO, our principal executive officer (PEO), and compensation actually paid to our CFO, our other non-PEO named executive officer, during each of the past two fiscal years, as well as total stockholder return and net income (loss) for each of the past two fiscal years.

	Summary Compensation Table Total for PEO ⁽¹⁾	Compensation Actually Paid to PEO ⁽²⁾⁽³⁾	Average Summary Compensation Table Total for Non-PEO Named Executive Officers ⁽⁴⁾	Average Compensation Actually Paid to Non-PEO Named Executive Officers ⁽⁵⁾⁽⁶⁾	Value of Initial Fixed \$100 Investment Based On Total Shareholder Return ⁽⁷⁾	Net Income ⁽⁸⁾
Year	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
2023	889,044	979,459	660,312	727,138	80.74	4,237,731
2022	889,853	607,859	660,908	452,477	72.35	7,185,934

(1) Amounts reported represent the Summary Compensation Table total for our CEO for each of the years presented. See *"Executive Compensation—Summary Compensation Table."*

- (2) Amounts reported represent compensation actually paid to our CEO for each of the years presented. The dollar amounts in this column do not reflect the actual amount of compensation earned by or paid to our CEO during the applicable year.
- (3) Compensation actually paid to our PEO consists of the following amounts deducted from or added to the Summary Compensation Table total for our CEO for each of the years presented:

	Patrick L. Lynch
Summary Compensation Table Total for 2023	\$ 889,044
<i>Deduct</i> : Stock awards ^(a)	0
Deduct : Option awards ^(b)	230,455
<i>Add</i> : Year-end value of equity awards granted during the year that are	272,272
outstanding and unvested ^(c)	
Add: Change in fair value of equity awards granted in prior years that are	27,498
outstanding and unvested ^(d)	

		Patric	k L. Lynch
Add:	Change in fair value of equity awards granted in prior years that vested during the year ^(e)		21,099
Add:	Value of dividend equivalents accrued on equity awards during the year		0
Compe	ensation Actually Paid for 2023		979,458
	ary Compensation Table Total for 2022	\$	889,853
Deduct	<i>t</i> : Stock awards ^(a)		0
Deduct	<i>t</i> : Option awards ^(b)		237,217
Add:	Year-end value of equity awards granted during the year that are outstanding and unvested ^(c)		148,057
Add:	Change in fair value of equity awards granted in prior years that are outstanding and unvested ^(d)		(128,556)
Add:	Change in fair value of equity awards granted in prior years that vested during the year ^(e)		(64,278)
Add:	Value of dividend equivalents accrued on equity awards during the year		0
Compe	ensation Actually Paid for 2022		607,859

(a) Represents the total of the amounts reported in the "Stock Awards" column in the Summary Compensation Table for the applicable year.

- (b) Represents the total of the amounts reported in the "Option Awards" column in the Summary Compensation Table for the applicable year.
- (c) Represents the year-end value of equity awards granted during the applicable year that are outstanding and unvested as of the end of such applicable year.
- (d) Represents the amount of change as of the end of the applicable year (from the end of the prior fiscal year) in fair value of any equity awards granted in prior years that are outstanding and unvested as of the end of such applicable year.
- (e) Represents the amount of change as of the vesting date (from the end of the prior fiscal year) in fair value of any equity awards granted in prior years that vested during the applicable year.

Since we do not have a pension plan, all of the foregoing adjustments are equity award adjustments for each applicable year and include the addition (or subtraction, as applicable) of the following: (i) the yearend fair value of any equity awards granted in the applicable year that are outstanding and unvested as of the end of such applicable year; (ii) the amount of change as of the end of the applicable year (from the end of the prior fiscal year) in fair value of any equity awards granted in prior years that are outstanding and unvested as of the end of such applicable year; (iii) for equity awards granted in prior years that are outstanding and unvested as of the end of such applicable year; (iii) for equity awards granted in prior years that are outstanding and unvested as of the end of such applicable year; (iv) for equity awards granted in prior years that vest in the applicable year, the fair value as of the vesting date; (iv) for equity awards granted in prior years that vest in the applicable year, the amount equal to the change as of the vesting date (from the end of the prior fiscal year) in fair value; (v) for equity awards granted in prior years that are determined to fail to meet the applicable vesting conditions during the applicable year, a deduction for the amount equal to the fair value at the end of the prior fiscal year; and (vi) the dollar value of any dividends or other earnings paid on equity awards in the applicable year prior to the vesting date that are not otherwise reflected in the fair value of such award or included in any other component of total compensation for such applicable year. Adjustments as provided in clauses (iii) and (vi) are inapplicable for all of the years presented in the table.

The valuation assumptions used to calculate fair values did not materially differ from those disclosed at the time of grant. The value of option awards is based on the fair value as of the end of the covered year or change in fair value during the covered year, in each case based on our Black-Scholes option pricing model, the assumptions of which are described in Note 10 to our consolidated financial statements included in our Annual Report on Form 10-K for the year ended August 31, 2023.

- (4) Average Summary Compensation Table total for non-PEO named executive officers reflects the Summary Compensation Table total for Matthew C. Wolsfeld.
- (5) The amounts in this column represent the compensation actually paid to Matthew C. Wolsfeld, our non-PEO named executive officer, for each of the years presented. The dollar amounts in this column do not reflect the actual average amount of compensation earned by or paid to the non-PEO during the applicable year.
- (6) Average compensation actually paid to our non-PEO named executive officer consists of the following amounts deducted from or added to the Summary Compensation Table total for our CFO for each of the years presented:

		Matthew C. Wolsfeld
Summary Compensation Table Total for 2023		\$ 660,312
Deduc	t: Stock awards ^(a)	0
<i>Deduct</i> : Option awards ^(b)		170,337
Add:	Year-end value of equity awards granted during the year that are outstanding and unvested ^(c)	201,243
Add:	Change in fair value of equity awards granted in prior years that are outstanding and unvested ^(d)	20,325
Add:	Change in fair value of equity awards granted in prior years that vested during the year ^(e)	15,595
Add:	Value of dividend equivalents accrued on equity awards during the year	0
Compensation Actually Paid for 2023		727,138
Summ	ary Compensation Table Total for 2022	\$ 660,908
Deduct : Stock awards ^(a)		0
Deduct : Option awards ^(b)		0
Deduc		
		175,334 109,432
Add:	<i>t</i> : Option awards ^(b) Year-end value of equity awards granted during the year that are	175,334
Add: Add:	 <i>t</i>: Option awards^(b) Year-end value of equity awards granted during the year that are outstanding and unvested^(c) Change in fair value of equity awards granted in prior years that are 	175,334 109,432
Deduc Add: Add: Add: Add:	t: Option awards ^(b) Year-end value of equity awards granted during the year that are outstanding and unvested ^(c) Change in fair value of equity awards granted in prior years that are outstanding and unvested ^(d) Change in fair value of equity awards granted in prior years that	175,334 109,432 (95,020)

- (a) Represents the total of the amounts reported in the "Stock Awards" column in the Summary Compensation Table for the applicable year.
- (b) Represents the total of the amounts reported in the "Option Awards" column in the Summary Compensation Table for the applicable year.
- (c) Represents the year-end value of equity awards granted during the applicable year that are outstanding and unvested as of the end of such applicable year.
- (d) Represents the amount of change as of the end of the applicable year (from the end of the prior fiscal year) in fair value of any equity awards granted in prior years that are outstanding and unvested as of the end of such applicable year.
- (e) Represents the amount of change as of the vesting date (from the end of the prior fiscal year) in fair value of any equity awards granted in prior years that vested during the applicable year.

Since we do not have a pension plan, all of the foregoing adjustments are equity award adjustments for each applicable year and include the addition (or subtraction, as applicable) of the following: (i) the average

year-end fair value of any equity awards granted in the applicable year that are outstanding and unvested as of the end of such applicable year; (ii) the average amount of change as of the end of the applicable year (from the end of the prior fiscal year) in fair value of any equity awards granted in prior years that are outstanding and unvested as of the end of such applicable year; (iii) for equity awards that are granted and vest in the same applicable year, the average fair value as of the vesting date; (iv) for equity awards granted in prior years that vest in the applicable year, the average amount equal to the change as of the vesting date (from the end of the prior fiscal year) in fair value; (v) for equity awards granted in prior years that are determined to fail to meet the applicable vesting conditions during the applicable year, a deduction for the amount equal to the average fair value at the end of the prior fiscal year; and (vi) the average dollar value of any dividends or other earnings paid on equity awards in the applicable year prior to the vesting date that are not otherwise reflected in the fair value of such award or included in any other component of total compensation for such applicable year. Adjustments as provided in clauses (iii) and (vi) are inapplicable for all of the years presented in the table.

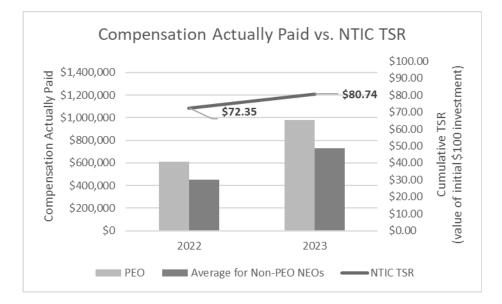
The valuation assumptions used to calculate fair values did not materially differ from those disclosed at the time of grant. The value of option awards is based on the fair value as of the end of the covered year or change in fair value during the covered year, in each case based on our Black-Scholes option pricing model, the assumptions of which are described in Note 10 to our consolidated financial statements included in our Annual Report on Form 10-K for the year ended August 31, 2023.

- (7) The total shareholder return is calculated by the difference between our common stock price at the end of the measurement period by our stock price at the beginning of the measurement period, including dividends.
- (8) Amounts reported represent the amount of net income reflected in our audited consolidated financial statements for the applicable year and is presented in thousands.

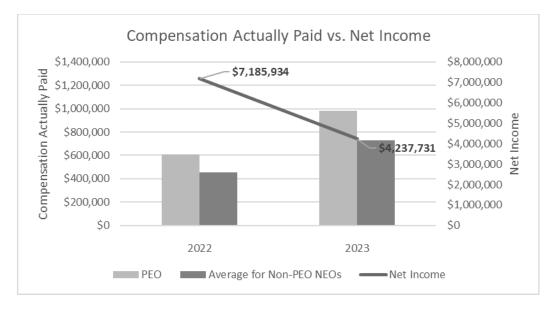
Pay Versus Performance Relationship

In accordance with Item 402(v) of SEC Regulation S-K, we are providing the following descriptions of the relationships between information presented in the Pay versus Performance table above. The graphs below illustrate a high correlation between compensation actually paid to our NEOs and our cumulative total stockholder return (TSR) and little correlation between compensation actually paid to our NEOs during 2022 and 2023 and our net income during those years.

Compensation Actually Paid and Company TSR. As demonstrated by the following graph, the amount of compensation actually paid to our NEOs is aligned with our cumulative TSR over the two years presented in the table. The alignment of compensation actually paid with our cumulative TSR over the period presented is because a significant portion of the compensation actually paid to our NEOs is comprised of equity awards, the value of which is driven by our stock price.



Compensation Actually Paid and Net Loss. As demonstrated by the following graph, the amount of compensation actually paid to our NEOs increased despite a decrease in our net income. This is a result of an increase in our stock price during fiscal 2023, which increased the compensation actually paid to our NEOs, despite a decrease in our net income.



Compensation Committee Interlocks and Insider Participation

No member of the Compensation Committee has served as one of our officers or employees at any time. Except as otherwise disclosed in this proxy statement, no member of the Compensation Committee has had any relationship with NTIC requiring disclosure under Item 404 of Regulation S-K under the Exchange Act. None of our executive officers has served as a director, or member of the compensation committee (or other committee serving an equivalent function), of an organization that has an executive officer also serving as a member of our Board of Directors or Compensation Committee.

RELATED PERSON RELATIONSHIPS AND TRANSACTIONS

Introduction

Below under "—*Description of Related Party Transactions*" is a description of transactions that have occurred during the past fiscal year, or any currently proposed transactions, to which we were or are a participant and in which:

- the amounts involved exceeded or will exceed the lesser of: \$120,000 or one percent (1%) of the average of our total assets at year end for the last two completed fiscal years; and
- a related person (including any director, director nominee, executive officer, holder of more than 5% of our common stock or any member of their immediate family) had or will have a direct or indirect material interest.

These transactions are referred to as "related party transactions."

Procedures Regarding Approval of Related Party Transactions

As provided in our Corporate Governance Guidelines, the Audit Committee will review, approve or ratify reportable related party transactions by use of the following procedures:

- NTIC's Chief Financial Officer, with the assistance of NTIC's legal counsel, will evaluate the disclosures provided in the director and officer questionnaires and from data obtained from NTIC's records for potential related person transactions.
- Management will periodically, but no less than annually, report to the Audit Committee on all related person transactions that occurred since the beginning of the prior fiscal year or that it believes will occur in the next year. Such report should include information as to (i) the related person's relationship to NTIC and interest in the transaction; (ii) the material facts of the transaction; (iii) the benefits to NTIC of the transaction; and (iv) an assessment of whether the transaction is (to the extent applicable) in the ordinary course of business, at arm's length, at prices and on terms customarily available to unrelated third party vendors or customers generally, and whether the related party had any direct or indirect personal interest in, or received any personal benefit from, such transaction.
- Taking into account the factors listed above, and such other factors and information as the Audit Committee may deem appropriate, the Audit Committee will determine whether or not to approve or ratify (as the case may be) each related party transaction so identified.
- Transactions in the ordinary course of business, between NTIC and an unaffiliated corporation of which a non-employee director of NTIC serves as an officer, that meet the below criteria are deemed conclusively pre-approved:
 - \circ at arm's length;
 - at prices and on terms customarily available to unrelated third party vendors or customers generally;
 - in which the non-employee director had no direct or indirect personal interest, nor received any personal benefit; and
 - in amounts that are not material to NTIC's business or the business of such unaffiliated corporation.

Description of Related Party Transactions

Please see "*Director Compensation*" and "*Executive Compensation*" for information regarding a consulting agreement we have with one of our current directors and the other compensation arrangements with our directors and executive officers.

G. Patrick Lynch is the President and Chief Executive Officer of NTIC. Inter Alia Holding Company owns 12.8% of the total voting power of NTIC. According to a Schedule 13D/A filed with the SEC on October 22, 2019, Inter Alia Holding Company is an entity of which Mr. Lynch is a 47% stockholder. Mr. Lynch shares equal voting and dispositive power over such shares with three other members of his family. Inter Alia Holding Company's address is 23205 Mercantile Road, Beachwood, Ohio 44122.

We have entered into agreements with all of our directors and executive officers under which we are required to indemnify them against expenses, judgments, penalties, fines, settlements and other amounts actually and reasonably incurred, including expenses of a derivative action, in connection with an actual or threatened proceeding if any of them may be made a party because he or she is or was one of our directors or executive officers. We will be obligated to pay these amounts only if the director or executive officer acted in good faith and in a manner that he or she reasonably believed to be in or not opposed to our best interests. With respect to any criminal proceeding, we will be obligated to pay these amounts only if the director or executive officer had no reasonable cause to believe his or her conduct was unlawful. The indemnification agreements also set forth procedures that will apply in the event of a claim for indemnification.

NTIC has not identified any arrangements or agreements relating to compensation provided by a third party to NTIC's directors or director nominees in connection with their candidacy or board service as required to be disclosed pursuant to Nasdaq Rule 5250(b)(3).

STOCKHOLDER PROPOSALS AND DIRECTOR NOMINATIONS FOR 2025 ANNUAL MEETING OF STOCKHOLDERS

Stockholders who, in accordance with Rule 14a-8 under the Exchange Act, wish to present proposals for inclusion in the proxy materials relating to the 2025 Annual Meeting of Stockholders must submit their proposals so that they are received by us at our principal executive offices no later than the close of business on August 6, 2024, unless the date of the meeting is delayed by more than 30 calendar days. The proposals must satisfy the requirements of the proxy rules promulgated by the SEC and as the rules of the SEC make clear, simply submitting a proposal does not guarantee that it will be included.

Any other stockholder proposals to be presented at the 2025 Annual Meeting of Stockholders (other than a matter brought pursuant to SEC Rule 14a-8) and any director nominations for the 2025 Annual Meeting of Stockholders must be given in writing to our Corporate Secretary and must be delivered to or mailed to and received at our principal executive offices not less than 90 days nor more than 120 days prior to the anniversary date of the 2024 Annual Meeting of Stockholders; provided, however, that in the event that the 2025 Annual Meeting of Stockholders is not held within 30 days before or after such anniversary date, notice by the stockholder to be timely must be received not later than the close of business on the 10th day following the day on which such notice of the date of the annual meeting was mailed or such public disclosure was made, whichever first occurs. The proposal or director nomination must contain specific information required by our Bylaws, a copy of which may be obtained by writing to our Corporate Secretary. The Nominating and Corporate Governance Committee will evaluate director nominee candidates recommended by stockholders in the same manner as those recommended by others. In addition, if applicable, stockholders who intend to solicit proxies in support of director nominees other than NTIC's nominees at the 2025 Annual Meeting must also comply with the additional requirements under Rule 14a-19 promulgated under the Exchange Act, as required by and in addition to our Bylaws, including providing a statement that such stockholder intends to solicit the holders of shares representing at least 67% of the voting power of NTIC's shares entitled to vote on the election of directors in support of director nominees other than NTIC's nominees, as required by Rule 14a-19(b) promulgated under the Exchange Act.

We encourage stockholders who wish to submit a proposal or nomination to seek independent counsel. NTIC will not consider any proposal or nomination that is not timely or otherwise does not meet the Bylaw and SEC requirements. We reserve the right to reject, rule out of order, or take other appropriate action with respect to any proposal that does not comply with these and other applicable requirements.

COPIES OF FISCAL 2023 ANNUAL REPORT

We have sent or made electronically available to each of our stockholders a copy of our annual report on Form 10-K (without exhibits) for the fiscal year ended August 31, 2023. The exhibits to our Form 10-K are available by accessing the SEC's EDGAR filing database at *www.sec.gov*. We will furnish a copy of any exhibit to our Form 10-K upon receipt from any such person of a written request for such exhibits upon the payment of our reasonable expenses in furnishing the exhibits. This request should be sent to: Northern Technologies International Corporation, 4201 Woodland Road, Circle Pines, Minnesota 55014, Attention: Stockholder Information.

Your vote is important. Whether or not you plan to attend the Annual Meeting in person, vote your shares of NTIC common stock by the Internet or telephone, or request a paper proxy card to sign, date and return by mail so that your shares may be voted.

By Order of the Board of Directors,

Richard J. Nigon *Chairman of the Board*

December 4, 2023 Circle Pines, Minnesota