

2019

# Nammo Sustainability Report

# MESSAGE FROM THE CEO

**Our license to operate as a leading defense & aerospace company relies on responsible business practices and good corporate citizenship. In 2019, we took important steps to further strengthen our corporate responsibility in order to meet the expectations of our stakeholders, employees and the societies in which we operate.**

Nammo's role as a manufacturer and supplier of defense products and services must be understood in the context of national and international security obligations and needs. Security in our daily lives is key to our well-being. Nammo is a trusted provider of defense materials and helps ensure the technological expertise needed to support EU and NATO allies.

The world is facing complex and evolving security threats. Our customers rely on our products and services to safeguard societal functions in peacetime, crisis situations, armed conflict and war. Nammo's license to operate relies on the reputation of our industry, the level of trust in the population, regulatory compliance, and stakeholder expectations. Corporate responsibility and sustainability are therefore at the core of our operations.

Throughout 2019 we have taken several important steps to structure and strengthen our sustainability efforts. Considerable work has

been done to identify the topics most material to our operations in close cooperation with our employees and stakeholders. These concern central aspects with regard to our business and value chain integrity, employee safety and well-being, and environmental – and product stewardship. Each topic is elaborated on in this report, which will lay the foundation for our 2030 Global Sustainability Strategy to be developed in 2020.

In this year's report, we are pleased to present an overview of how Nammo is contributing to the UN Sustainable Development Goals (SDGs). Other highlights in our sustainability efforts this year includes the establishment of a new and strengthened grievance mechanism and our use of the OECD Responsible Business Conduct Compass.

Our ambition is to not only meet regulatory requirements, but to be

one step ahead. Being at the forefront on sustainability issues gives Nammo a comparative business advantage and secures our license to operate. I firmly believe that our products and processes can contribute to a more sustainable world, be it environmentally friendly products and processes, energy and water life cycle management or maybe sustainable propulsion technologies for use in future Moon or Mars missions.

We reaffirm our commitment to support the Ten Principles of the United Nations Global Compact in the areas of Human Rights, Labor, Environment and Anti-Corruption. These principles continue to play an important part of the strategy, culture and day-to-day operations of Nammo.

The report and data cover the period January 1 to December 31, 2019.

**Morten Brandtzæg**  
PRESIDENT & CEO



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# NAMMO AT A GLANCE

## LOCATIONS

33

28 Production sites  
5 Sales offices  
Headquarter in Raufoss, Norway

## OWNERS

50%  
50%

Patria Oyj &  
The Norwegian State, represented  
by the Norwegian Ministry of Trade,  
Industry and Fisheries

## EMPLOYEES

2 404

25,3 % Women  
74,7 % Men

## MARKET

80% Defense &  
Aerospace  
20% Commercial

## REVENUE

NOK 5  
Billion

90 % of revenue generated by  
US and European markets.

## BUSINESS UNITS

4

- Commercial Ammunition
- Small and Medium Caliber Ammunition
- Large Caliber Systems
- Aerospace Propulsion

Our product portfolio includes shoulder-launched munitions systems, military and sports ammunition, rocket motors for military and space applications, and environmentally friendly demilitarization services.

## OUR VISION: SECURING THE FUTURE

- We will develop and secure a long-term sustainable business for our customers and employees.
- Our future development depends on a secure and safe working environment. We must emphasize the importance of every single employee.
- We will protect our national and allied forces with high quality defense products.
- We will secure the future development of eco-friendly products, processes and services.
- We will secure further growth based on strong financial performance.



## OUR VALUES

Our values are the fundamental principles guiding the way we do business and interact with stakeholders. These are:

**PRECISION:** We are reliable and accurate in our technology, processes and business.

**DEDICATION:** We are enthusiastic and creative, always searching for the best solutions.

**CARE:** We are inclusive and open-minded, always encouraging team spirit and cooperation.



## REPORTING FRAMEWORK

This report support the Global Reporting Initiative (GRI) standards, which represent global best practices in sustainability reporting. The GRI standards are a trusted reference for policy makers and regulators worldwide as they encourage and enable credible non-financial reporting by companies under their jurisdictions.

Nammo's sustainability reporting is further and more specifically based on the following expectations and guidelines.

### **Regulatory framework:** The Norwegian Accounting Act

The Norwegian Accounting Act requires that large enterprises report on corporate social responsibility in the Directors' report or in a separate report. The report must include information about human rights, employee rights and social conditions, the environment and anti-corruption work.

### **Reporting standard:** Global Reporting Initiative

In line with the GRI reporting principles, Nammo has conducted a materiality analysis identifying material topics. Nammo reports on topic-specific disclosures corresponding with the GRI Standard and other appropriate disclosures where the material topic is not covered by an existing GRI Standard. In these instances, Nammo has chosen to report using the Sustainability Accounting Standards Board (SASB) standards, as well as on custom indicators.

- The report has been prepared in accordance with the GRI Standard: Core option.
- Consolidation approach used for calculating emissions is financial control.
- A GRI Index is available at [www.nammo.com](http://www.nammo.com).

### **Guidelines:** WHITE PAPER NO. 8 (2019-2020) The Norwegian State's direct ownership of companies – Sustainable development

The Norwegian state's ownership expectations on corporate social responsibility and sustainability are:

- Safeguarding of human rights and labor rights, reduction of climate and environmental footprint, and prevention of economic crime.
- Publicly available tax policy.
- Openness and transparency on significant areas, goals and measures in its work with responsible business conduct.
- Materiality assessment to identify and determine priority areas.
- Openness about, and reporting on, material topics identified.
- Assessment of climate related risks and opportunities .
- Continuous work on diversity, including gender balance, integrated into the company's strategy.

### **Guidelines:** UN Global Compact

The UN Global Compact requires participating companies to conduct business responsibly by aligning their strategies and operations with the ten principles on human rights, labor, environment and anti-corruption and to take strategic actions to advance broader societal goals including the UN SDGs. Participating companies are required to provide an annual Communication on Progress (COP). Nammo has been a Global Compact signatory since 2012.

- We view this report to be our Communication on Progress to the UN Global Compact (active reporting level).

### **Guidelines:** The OECD Guidelines for multinational enterprises

The OECD Guidelines for Multinational Enterprises (OECD Guidelines) are recommendations from governments to multinational enterprises on responsible business conduct. The OECD Guidelines set standards for responsible business conduct across a range of issues such as human rights, labor rights, and the environment.

# CHAPTER 1: SUSTAINABILITY IN NAMMO

**Nammo supports and protects national and allied forces with high-quality defense products. Our social, environmental and ethical responsibilities are governed by our values and inform the decisions we make every day.**

Nammo is expected to conduct its business in a transparent and responsible manner. This includes identifying material topics that highlight Nammo's priority issues on sustainability, mapping climate risks and opportunities, working continuously on diversity, and supporting the United Nations Sustainable Development Goals.

We take these expectations seriously and participate in global initiatives

such as the UN Global Compact and abide by the OECD Guidelines for Multinational Enterprises. This commits us promoting human and labor rights, protecting the environment, ensuring anti-corruption efforts, and conducting business in a global context consistent with applicable laws and internationally recognized standards.

In 2019, Nammo started the important work to developing a

global sustainability strategy for the group focused on goals towards 2030. This included a thorough materiality assessment based on the input from our most important stakeholders. The result from the assessment will form the basis of our sustainability priorities and efforts in the years to come. Nammo will also develop goals and corresponding short and long-term targets to monitor our performance throughout the strategy period.

## SUSTAINABLE DEVELOPMENT GOALS



Nammo is a UN Global Compact signatory and works to help achieve the United Nations Sustainable Development Goals.



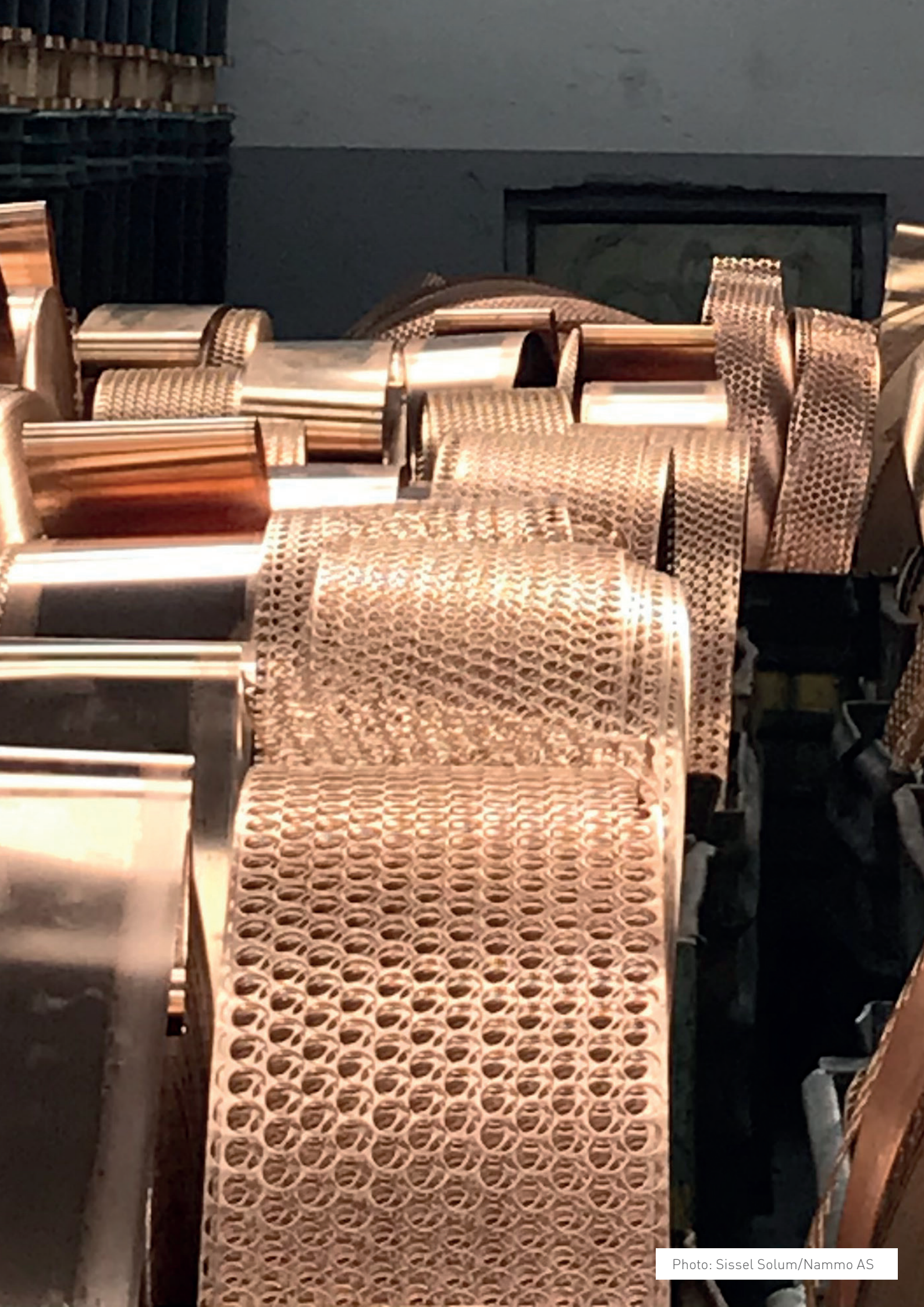
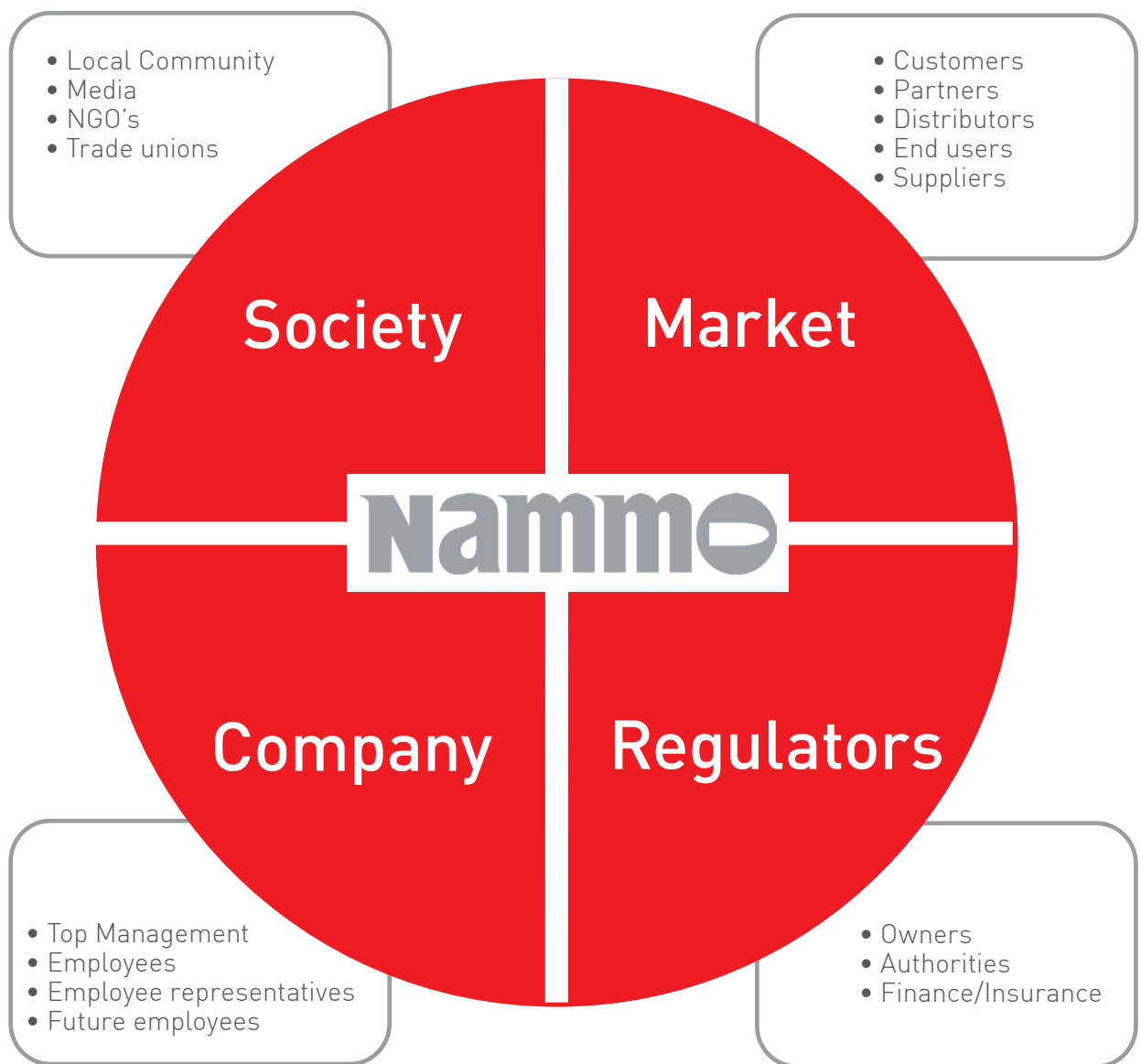


Photo: Sissel Solum/Nammo AS

## STAKEHOLDER ENGAGEMENT

We put considerable effort into maintaining an open dialog with our stakeholders in the countries where we operate. Many of Nammo's production sites are located in rural areas where they become major employers and of great importance to the local community.

We continuously assess the potential impact and views of different stakeholders. Over the past two years we have conducted a stakeholder analysis and a materiality assessment involving several stakeholder groups. Although stakeholder engagement varies across the countries in which Nammo operates, the overview below provides insight on how, when, and with whom we engage on sustainability topics.





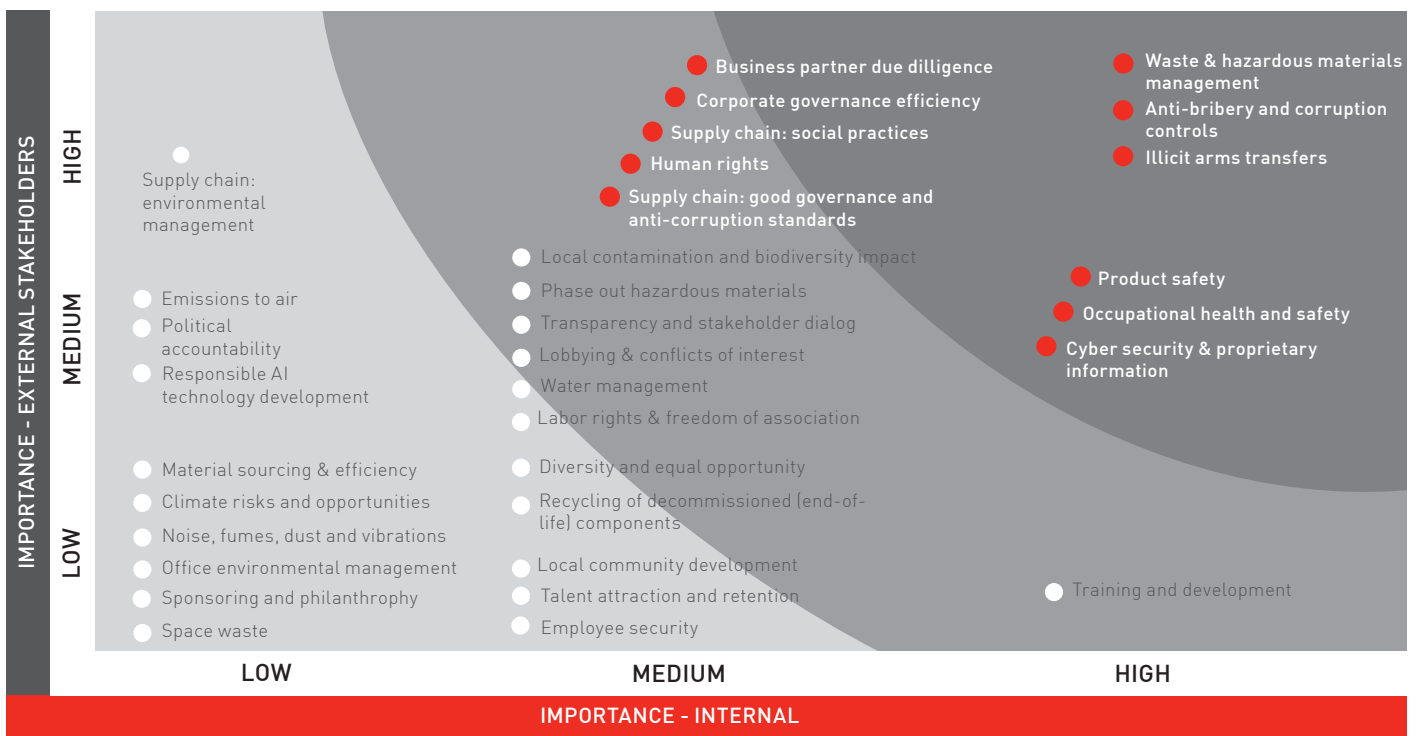
Stakeholder groups	Engagement type	Frequency of engagement	Key topics and concerns raised	Nammo's response
<b>Owners</b>	Reports, meetings	Monthly, quarterly, annually	Governance, business and compliance, sustainability, occupational health & safety	Quarterly report on Finance, Business, Governance. Compliance program and sustainability reporting
<b>Authorities</b>	Meetings, seminars, conferences, political hearings	Monthly, quarterly, annually	Business, regulations, export control, ethics, CSR	Ability to address and respect regulatory compliance obligations
<b>Civil Society NGO Media Network &amp; Associations</b>	E-mail, meetings, public events  Social media, interviews on tv/radio/newspapers, own content  Membership, committees, events	On an as-needed basis and driven by events	Ethics, license to operate, export control and arms trade, human rights, sales, general business, local labor, environmental protection, local contribution  Regulatory, ethics, industrial cooperations, sustainability	Transparency and openness, responsiveness  Build knowledge and understanding  Social responsibility, local sponsor to sport, culture and science for youths.  Good neighborliness  Active participation and/or leadership in committees and work-groups
<b>Customers &amp; partners</b>	Customer meetings, product demonstrations, seminars, trade shows, Championships	Daily, weekly, monthly	Contract related, product performance, safety and quality. Customer satisfaction	Responsive actions and support business integrity  Customer satisfaction and brand surveys
<b>Suppliers</b>	Meetings, site visits, supplier forums, request for tenders	Daily, weekly, monthly, annually	Flow down of contracts, quality and delivery	Communication of Supplier Conduct Principles, Supplier questionnaire, quality audit, Modern Slavery Act Statement
<b>Employees</b>	Internal communication channels, team and departmental meetings, all-hands meetings, surveys, collaboration with unions, European work council	Daily, weekly, monthly, annually	Business status, strategy and profitability, Environment, diversity, ethic and anti-corruption, safety and IT Security	Use of Workplace, training and mentoring, Appraisal reviews, Ethical Code of Conduct, IT instructions, HESS policy, Surveys on employee satisfaction, branding & sustainability, career day

## MATERIALITY ASSESSMENT

In 2019, Nammo conducted a comprehensive materiality assessment in order to identify and prioritize potential environmental, social and governance (ESG) issues that could impact our business and our stakeholders. This assessment is a formal requirement for reporting in accordance with the Global Reporting Initiative (GRI) standard.

Critical stakeholders from business, government and civil society were consulted, providing a valuable evaluation of Nammo's risks and opportunities related to sustainability issues. Additionally, an extensive internal survey was conducted in order to understand how and which significant sustainability risks and opportunities impact our business.

By matching the opinions of external stakeholders and employees, a matrix was produced, illustrating the sustainability issues that are most material and of highest importance to the company.




The materiality analysis has given Nammo a well-founded overview of the topics that are important to the business both from an internal and external perspective. This knowledge will make Nammo better positioned to:

- prioritize and focus our sustainability efforts on the issues that the general public values.
- develop and implement relevant sustainability ambitions and targets.
- understand how events related to the different material topics could impact our business objectives, operation and strategic ambition.
- ensure that our communication of sustainability efforts is concise and relevant to our stakeholders.

Having conducted a materiality assessment, Nammo is better positioned to fulfill its ambition of a sustainable and secure future to the best interests of the employees, customers, shareholders and the civil society.

## SUSTAINABILITY PRIORITIES

Nammo's sustainability priorities are based on the results of the materiality assessment, the global initiatives in which we participate, and the laws and regulations to which we are subject.

Sustainability theme	Priorities	Sustainable development goals
<b>Business integrity</b>	<ul style="list-style-type: none"> <li>• Anti-bribery and corruption controls</li> <li>• Corporate governance efficiency</li> <li>• Human rights &amp; labor</li> <li>• Cyber security &amp; proprietary information</li> <li>• Illicit arms transfer</li> </ul>	
<b>Value chain integrity</b>	<ul style="list-style-type: none"> <li>• Business partner due diligence</li> <li>• Supply chain: social practices</li> <li>• Supply chain: good governance &amp; anti-corruption standards</li> </ul>	
<b>Employee safety and well-being</b>	<ul style="list-style-type: none"> <li>• Occupational health and safety</li> <li>• Anti-discrimination &amp; Diversity</li> </ul>	 
<b>Environmental stewardship</b>	<ul style="list-style-type: none"> <li>• Climate risk</li> <li>• Waste &amp; hazardous materials management</li> <li>• Emissions</li> <li>• Energy use</li> <li>• Water management</li> </ul>	 
<b>Product stewardship</b>	<ul style="list-style-type: none"> <li>• Product safety</li> <li>• Lifecycle management</li> </ul>	 

## Chapter 1 Sustainability in Nammo

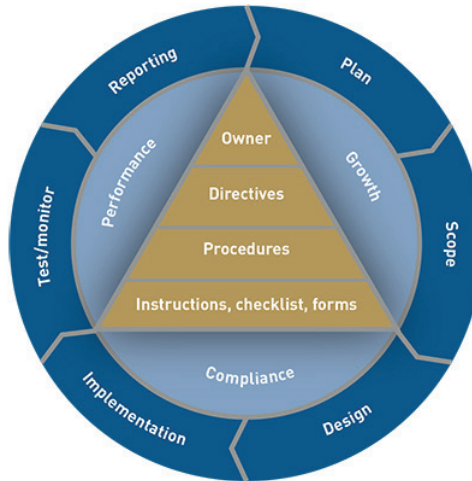
### GOVERNANCE

Corporate governance is a key element in the short-term sustainability of business operations, as well as in preparing for long-term development of the company. Responsible corporate governance and management reduce risks faced by the company and ensure efficient and sustainable utilization of resources.

Nammo's governance system encompasses its leadership culture, vision and values, Ethical Code of Conduct, risk management, and reporting and control mechanisms.

It has been developed by the Board of Directors and the Nammo management team to ensure compliance with relevant laws and regulations, as well as efficient control of business processes

**Corporate governance structure**  
Nammo is a limited liability company



established under Norwegian law, with a governance structure based on the Norwegian Limited Liability Companies Act. The consolidated financial statements have been prepared in accordance with the Norwegian Accounting Act and the Norwegian Generally Accepted Accounting Principles (GAAP). For further information on Nammo governance structure please refer to

our 2019 Annual Report pages 48-49.

#### Management of responsible business and sustainability

The Chief Compliance Officer (CCO) leads the operational management of, and ensures compliance with, anti-bribery and corruption measures, export and trade regulations, and responsible business and sustainability. The CCO reports operationally to the Senior Vice President Legal & Compliance and meets with the CEO on a quarterly basis to present and review the status of activities and discuss strategic and operational topics. The CCO presents the status of compliance activities to the Group Management on a regular basis and to the Board of Directors, annually, or more frequently, if needed. The compliance overview is also part of the monthly reporting at Group level and to the Board of Directors.

#### Ethics & Integrity Council (EIC)

In 2019, Nammo replaced the previous operational Ethics Committee with an Ethics & Integrity Council. The Council is to act as an independent council across the organization. Its role is to advise the CCO on matters such as internal grievance mechanisms and policy developments. Duties, responsibilities, and activities are disclosed in the Annual Board Report.

#### Governing responsible business & sustainability documents

The way we conduct our business is based on our policies, procedures and guidelines. Those most relevant for our sustainability efforts are listed in the table below.

Sustainability related policies, procedures & guidelines		Public:
<b>Ethical Code of Conduct</b>	Compliance	Yes
<b>Anti-corruption manual</b>	Compliance	Yes
<b>Supplier Conduct Principles</b>	Compliance	Yes
<b>Modern Slavery Act Statement</b>	Compliance	Yes
<b>HESS policy</b>	HESS	No
<b>Do the Right Thing - How to report concern</b>	Compliance	No
<b>Procedure for Investigation Response Plan</b>	Compliance	No
<b>Procedure for IT security</b>	ICT	No
<b>IT User Instructions</b>	ICT	No
<b>Policy for Disaster Recovery Planning</b>	ICT	No
<b>Policy for Encryption</b>	ICT	No
<b>Procedure for Company Business Representation</b>	BD	No
<b>Procedure for Risk Evaluation Sales</b>	BD	No



The Chief Compliance Officer (CCO) is responsible for keeping Nammo's Ethical Code of Conduct up to date. The Ethics and Integrity Council shall revise the Code before final approval by the Board of Directors.

Nammo's Ethical Code of Conduct outlines the overarching ethical principles that govern decisions and behavior for all employees and third parties acting on behalf of our company. All Nammo employees receive the Ethical Code of Conduct as part of the onboarding process. It provides

specific guidance for handling corruption, conflicts of interest, harassment and discrimination.

#### The Nammo Management System (NMS)

The NMS describes how the company is managed and our approach to identifying and handling risks. The system includes governing documents (directives, procedures and instructions) that are evaluated regularly. The various responsibilities are each delegated to the relevant

legal subsidiaries, business units and corporate functions. Directives are defined for areas such as strategy and business development, finance, risk management, organizational and employee development, HESS (Health, Environment, Safety and Security), Communication, Information Technology and Legal & Compliance.

## COMPLIANCE AND RISK MANAGEMENT

**Nammo's corporate governance system consists of a compliance program and a management system. This ensures that our business operations comply with applicable laws, regulations, and industry standards. The system also supports long-term development of the company and serves as an essential risk-mitigating factor for current and future operations.**

Corporate compliance in Nammo focuses on the three areas of compliance: anti-bribery & corruption, export & trade regulations, and responsible business & sustainability. These areas are based on the company's risk assessment and form the foundation of Nammo's compliance program. The program involves planning, monitoring, communication, and training in these three areas.

The compliance program is evaluated, reviewed and tested internally on

a continual basis to improve its suitability, adequacy and effectiveness. This includes testing implemented controls and analyzing potential violations or circumventions of the company's policies, directives or processes.

Nammo conducts employee surveys to measure its compliance culture and system of internal controls, monitoring, and communications. Surveys are also used to identify best practices and detect new risk areas.

The results of any evaluation and review of the program, including recommendations for improvement, are reported to the Group Management Team and the Board of Directors.

The compliance program is evaluated and assessed by a third party every third year and the results are reported to the Group Management Team and the Board of Directors. The compliance program was last evaluated in 2018 with a new evaluation set for 2021.

In 2019 Nammo implemented a new internal grievance mechanism for misconduct. All reports are handled confidentially through our reporting channel, SpeakUp, which can be accessed by phone or online and with a specific country code as instructed in the "Do the Right Thing" manual. The service is managed by a third party who facilitates dialog between the company and the reporting employee. Employees can report in their native language and the system is available 24/7. Nammo does not have access to the individuals' identity if they choose to report their concerns anonymously. The system is encrypted and GDPR compliant and can be used by all employees outside the US. A similar system will be established for all employees in the US during 2020.



## Chapter 1 Sustainability in Nammo

All reports made through the SpeakUp system are forwarded to the company's CCO, who then evaluates them in cooperation with the Ethics and Integrity Council (EIC). Depending on the risk level or conflict of interest, the CCO and the EIC can establish an investigation response team. The response team shall follow the Group's Investigation Response Plan.

Nammo expects its managers to emphasize the value of reporting compliance concerns promptly and fostering an environment of open

reporting. As embedded in our Ethical Code of Conduct, Nammo does not tolerate retaliation against any employee who raises a concern in good faith.

Third parties who would like to report concerns about Nammo are welcome to do so by contacting [ethics@nammo.com](mailto:ethics@nammo.com). This contact e-mail is also listed in our Supplier Conduct Principles and the Ethical Code of Conduct.

In 2019 there were 51 reported

concerns compared to 39 in 2018. The majority of the concerns were in the category of behavioral misconduct and were handled through the human resources department in the local line organization according to company procedure. Three concerns were raised directly to compliance: two internally and one by an external stakeholder. Compliance completed one investigation in Q1 and began another in Q4. The external case was reported by an anonymous source. The case has been added to the company's Dilemma Bank for future training sessions.

### Responsible Business Conduct (RBC) Compass

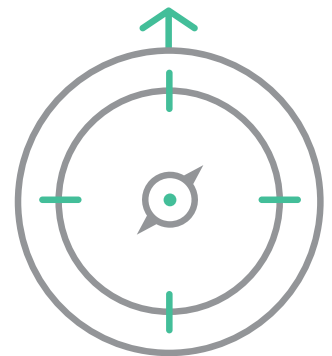
In 2019, Nammo decided to test the OECD self-assessment tool, the Responsible Business Conduct Compass (RBC Compass). The Compass provides practical support to the company by

1. introducing the expectations for responsible business conduct set out in the OECD guidelines;
2. measuring the company's performance on topics such as human rights, employment and industrial relations, the environment, consumer/customer interests, bribery and anti-corruption, taxation and competition regulation;
3. suggesting policy statements for the company to consider; and
4. providing graphical presentation of sustainability performance useful for internal and external communication, as well as gap analysis for further improvement.

Nammo will continue to use the Responsible Business Conduct Compass as an internal self-assessment tool in 2020.

### RBC Compass Self-assessment tool

Responsible Business Conduct



## EXPORT CONTROL

Export control regulations are intended to ensure that defense-related products, technology and services are only exported in accordance with a country's security

and defense policy, and that exports of dual-use items do not contribute to the proliferation of weapons of mass destruction (nuclear, chemical and biological weapons) or their means of delivery.

Although countries have their individual export control regimes, similar export control principles apply across Nammo's operating countries, i.e., Norway, Switzerland, the United States and countries in the European Union. Common to all is the requirement of an export license approved by the national authorities



## Chapter 1 Sustainability in Nammo

when exporting defense products for military purposes.

### License to operate

Nammo's license to operate and reputation as a reliable partner hinges on our ability to conduct business in accordance with national laws and regulations in all the markets in which we operate. We will always comply with applicable export control regimes and authorizations. Compliance with export regimes is the responsibility of every Nammo employee.

It is the duty of Nammo to provide all required information to the relevant export authorities. All products developed and manufactured by Nammo shall comply with international law and every export of a Nammo product, technology or service requires an export license from the national authorities in the country of production.

Any infraction of export control rules could have a range of negative consequences. Fines, export and import bans, and other sanctions all pose serious threats to Nammo's business and reputation.

### Risk mitigation

We believe that it is a risk mitigating factor that all our production facilities are located within the EU, Norway, Switzerland and the United States. All of Nammo's production facilities have internal procedures in place to protect our technologies and processes and assure compliance with national and international export control agreements and regimes. Each legal entity has in-house experts to handle local rules and regulations.

Understanding export control regimes is core to keeping our business going. We work continuously to raise awareness among our employees through regular export control training and process improvement.

### Internal control and disclosures

Similar to other internal procedures, export control systems are not infallible. Even with our strict compliance and many safeguards in place, we recognize that an export could still fall afoul of regulations.

Internal review and control, in addition to self-assessments, are key tools for continuous improvement. If a deviation or problem is uncovered, we will investigate and prepare for full disclosure. Nammo is committed to working transparently with the authorities to identify any weaknesses in our system and adjust procedures accordingly.

There is an international market for illegal procurement of technology for military use. It is therefore essential that Nammo demonstrate awareness with regard to due diligence on how business is performed and what type of products are sold to whom and in line with which regulations.

## STATUS 2019

- Nammo was not involved in any legal proceedings associated with incidents of corruption, bribery or illicit international trade in 2019.
- Nammo trained more than 200 key employees engaging with controlled products and technologies in national and international export control regulations.

## KEY ACTIONS FOR 2020:

- Develop and implement a global sustainability strategy.
  - Develop goals and targets for all prioritized areas.
- Conduct a company-wide climate risks and opportunities assessment.
- Explore the need to develop a separate tax policy.
- Implement a new risk management tool and an overall risk management process in order to further strengthen our supply chain due diligence.
- Further integrate human rights into due diligence and compliance in Nammo.
- Review self-assessment of all legal entities according to OECD's Responsible Business Conduct Compass.
- Expand existing training protocols:
  - Make dilemma training an annual requirement for all employees in high-risk positions, including all management teams.
  - Implement web-based export control training.
  - Conduct "red flag" fraud awareness training in two countries and four locations.

# CHAPTER 2: BUSINESS INTEGRITY

**Nammo aspires to develop and secure long-term sustainable business for our customers and employees. We believe that ensuring business integrity within the company and in our value chain is key to succeeding.**

The defense industry is exposed to risks such as corruption, cyberattacks, and leakage of proprietary information. Such risks can have severe consequences for Nammo, our business partners, and the societies in which we operate. Nammo therefore places a premium on managing and mitigating these risks. Moreover, we are committed to respecting and protecting human rights and ensuring that our ethical standards are upheld throughout our value chain

## ANTI-BRIBERY AND CORRUPTION CONTROLS

**Nammo has zero tolerance for corruption. We are committed to the United Nations Global Compact, including Principle 10, which commits us to working against corruption in all its forms.**

As we focus primarily on EU and NATO markets, we are less exposed to corruption than the industry as a whole. Ninety-three percent of our business comes from the EU, the Nordic countries, and the United States—markets which represent relatively low levels of corruption risk. The table to the right shows the countries from where we operate and how they rank in the 2019 Transparency International Corruption Perception Index (CPI). The remaining seven percent of our business (i.e., excluding the EU, Norway, and the United States) comprises markets in Asia, Oceania, and the Middle East, which include a number of countries with equally low levels of corruption and regulation (e.g., Japan and Australia). For remaining markets in countries with medium to high level of corruption risk Nammo has a rigorous sales risk evaluation before onboarding partners, customers and suppliers. A higher risk evaluation also necessitates a more rigorous and enhanced due diligence process.

The Transparency International 2019  
Corruption Perception Index

COUNTRY	CPI SCORE	RANK
Norway	84	7
Sweden	85	4
Finland	86	3
Germany	80	9
Switzerland	85	4
Spain	62	30
US	69	23
Ireland	74	18
UK	77	12

The Nammo Ethical Code of Conduct and the Anti-Corruption Manual are based on regulations in line with the U.S. Foreign Corrupt Practices Act (FCPA) and the UK Bribery Act 2010. Moreover, Nammo's legal entities must adhere to their local authorities' export regulations (see page 15).

All employees must follow the Ethical Code of Conduct, which outlines

Nammo's policy and guidelines for handling corruption and bribery. This includes being familiar with the Ethical Code of Conduct, taking part in training, seeking advice, and reporting any incidents. All Nammo employees receive the Ethical Code of Conduct during onboarding.

Anti-bribery and corruption is an essential part of the Nammo Compliance Program (read more about this in chapter 1). Our Chief Compliance Officer (CCO) is responsible for the design and implementation of the Program, which includes anti-bribery and corruption (ABC) communication and training.

Our ABC training program comprises three modules: e-learning, dilemma training, and proactive "red flag" fraud training. It is part of the monthly compliance reporting to the Board of Directors, and the management group is regularly informed of progress in the program.



The e-learning module aims to raise awareness of ethics, anti-corruption measures, and information security among Nammo employees. A monthly exercise is distributed to all employees who have access to company computers in their local language.

Workers without a company e-mail address do not receive the e-learning training. The middle management shall present the e-learning lessons to these workers during their regular meetings (at a minimum, monthly, although meetings with production staff are daily or weekly).

In 2019, 1 750 (out of 2 404) employees were invited to complete the training modules resulting in a completion rate of 88 percent.

The e-learning exercises are also a requirement for all external sales representatives and the external board members. As of 2019, all Nammo's board members had completed the e-learning training.

Dilemma training is workshop training for middle management employees in high-risk positions. Five high-risk teams underwent the dilemma training in 2019. Nammo has developed an in-house Dilemma Bank with around 30 different dilemmas covering areas of culture, finance, business ethics, procurement, and personal conduct. In 2019, 77 employees in the US and 8 employees in Norway received dilemma training on ethics and anti-corruption.

COUNTRY	No of total employees	Completed e-learning
US	589	83 %
Norway	791	79 %
Sweden	287	53 %
Finland	340	53 %
Germany	155	34 %
Spain	160	45 %
Switzerland	12	100 %
UK	43	100 %
Ireland	22	100 %
Australia	1	100 %
India	1	100 %
Poland	0	0 %

"Red flag" fraud awareness training is a tailor-made training course for the administration and middle management at each subsidiary. Target groups are all administrative functions (sales, finance, contract, procurement, supply-chain, R&D, management). After training is completed, corrective actions are defined and will be subject to review. Optimally, "red flag" training should be repeated every three years. In 2019, no "red flag" trainings were carried out, but preparations were started for a training session to take place early 2020 in Germany.

Employees of newly acquired companies must all partake in a program introducing Nammo's company culture and the Ethical Code of Conduct and an interactive workshop with a set of different ethical dilemmas to be presented and discussed. This training shall be accomplished within the first 100 days after the acquisition and is a part of our general risk management procedures when acquiring new companies.

In 2020, Transparency International will publish their Defense Companies Index on Anti-Corruption and Corporate Transparency (DCI). The DCI Index measures the transparency and quality of ethics and anti-corruption programs in the world's largest defense companies.

The DCI 2020 will assess 140 of the world's leading defense companies across 39 countries. The DCI includes Nammo and serves as an important benchmark for our governing system for anti-bribery and corruption controls.

The Index was previously published in 2012 and 2015. Nammo engaged closely with Transparency International during 2019 as part of the review to be released in 2020.



### STATUS 2019

#### Anti-bribery and corruption controls

- Nammo has not been subject to any investigations, fines, or sanctions in 2019 relating to any ethical breach of laws or regulations.
- Eighty-eight percent of Nammo employees completed the e-learning training (on ethics and IT security).
- Dilemma training completed for 85 employees in high risk positions.

### TARGET 2020

#### Anti-bribery and corruption controls

- Continue to raise awareness through mandatory e-learning program.
- Revise the Ethical Code of Conduct.
- Expand our dilemma training to all employees in high-risk position in all our locations.
- "Red flag" fraud training of 4 locations in two countries.
- Evaluate use of new fraud and corruption risk methodology.

## HUMAN RIGHTS AND LABOR

Nammo is committed to respecting and protecting human rights in all its operations. We support and respect the protection of internationally proclaimed human rights including the International Bill of Human Rights, the core International Labor Organization (ILO) Conventions and the UN Guiding Principles on Business and Human Rights (UNGP).

As a signatory to the UN Global Compact, we are committed to the following principles concerning human rights and labor. Namely, businesses should

- support and respect the protection of internationally proclaimed human rights (Principle 1),
- make sure that they are not complicit in human rights abuses (Principle 2),
- uphold the freedom of association and the effective recognition of the right to collective bargaining (Principle 3),
- support the elimination of all forms of forced and compulsory labor (Principle 4),
- support the effective abolition of child labor (Principle 5), and
- support the elimination of discrimination in respect of employment and occupation (Principle 6).

Every entity at Nammo is responsible for ensuring that the Group does not violate human rights in any of its business operations, as well as being aware of its corporate social responsibility in the local community. Internal control of the company's entities is a continuous process performed to secure compliance with the ILO standards. Nammo

employees shall have safe and secure working conditions. Our human resources policy shall ensure equal opportunities and rights and prevent discrimination on the grounds of gender, ethnicity, national origin, skin color, language, sexual orientation, marital status, religion, philosophy of life, and/or age. This applies, in particular, to recruitment, career

development, equal pay for equal work, and working conditions.

#### Supporting freedom of association

We strongly support freedom of association and collective bargaining as per the ILO standard. Seventy percent of Nammo's workforce is covered by collective bargaining agreements. All employees are

covered by such agreements where they exist, regardless of whether or not an employee is a union member (with the exception of the executive management team). We deem there to be a low risk of violation when it comes to Nammo's own operations; however, we have identified a higher risk in our supply chain.

#### Human rights considerations in export

Human rights considerations are also part of the export controls for many of the countries we operate in. Nammo considers national and international regulations for export of defense material an integral part of our work on human rights. Human

rights risks are to be identified as part of the risk management process before sales are made to countries evaluated as medium to high risk outside the EU and NATO. Key risks regarding certain countries include geopolitical changes taking place after contract signature.

#### Combating human trafficking

Nammo will not tolerate any form of harassment based on race, color, religious affiliation, national origin, citizenship, age, gender, sexual orientation, marital status, disability, or any other such discriminating factors. Even in countries without a legal prohibition, Nammo does not permit the purchase of sexual

services in connection with work or assignments for the company. In this way, Nammo contributes to combating human trafficking.

As risks may be higher in the supply chain, we expect all suppliers to comply with our Supplier Conduct Principles which are supported by our Modern Slavery Act Statement. The statement is also intended to combat forced or compulsory labor, even if there is a low risk of such incidents in Nammo's own operations. Further information on human rights and labor requirements for our suppliers can be found under the chapter about Value Chain Integrity.

## STATUS 2019

### Human rights and labor

- There were no reported incidents of discrimination resulting in a legal verdict.
- Implemented a new grievance mechanism. SpeakUp, for anonymous reporting at all European sites.
- Modern Slavery Act Statement 2019 was published.

## TARGET 2020

### Human rights and labor

- Develop human rights policy based on human rights risk assessment.
- Implement an e-learning program on human rights to be completed on a regular basis for targeted employees.
- Further integrate human rights into due diligence and compliance at Nammo.
- Implement a new grievance mechanism in the US..



## CYBERSECURITY AND PROPRIETARY INFORMATION

**In Nammo, we work continuously to reduce the risks related to cybersecurity. Our IT strategy outlines the main efforts, including improving technical security, limiting the attack surface, and raising awareness levels among employees.**

Cybersecurity threats pose financial, reputational and societal risks. Appropriate IT security measures are critical to safeguarding vital product information generated by the Nammo Group, its customers, and its suppliers. Like most defense and aerospace companies, Nammo experiences cyberattacks on a regular basis.

Security incidents are related to fraud, sabotage, extortion, or attempts to retrieve proprietary information. Nammo must comply with the relevant IT security and privacy regulations in all countries where we are present.

Compliance with cybersecurity guidelines falls under the Finance & IT organization under the leadership of the Chief Financial Officer of the Nammo Group.

Proprietary Information (PI) is one of Nammo's most valuable resource. It is the intangible lessons and experiences we have amassed over the years, that make Nammo what it is.

Effective protection of Nammo's PI in addition to making sure we have secure IT-systems and protection against unauthorized access from outside Nammo, is done by ensuring proper Non-Disclosure Agreements are in place whenever there is a need to disclose Nammo PI to any third parties and affix appropriate marking of sensitive documents in order to ensure that our PI is not diverted to any unauthorized third parties or is being exploited against Nammo's interest.

### STATUS 2019

#### Cybersecurity and proprietary information

- There have been no reports of major cybersecurity violations or loss of proprietary information.
- Cybersecurity continues to be a strong focus for Nammo due to the nature of the products manufactured by the group. Nammo Raufoss has invested in security improvements during the year with support from Norwegian national security authorities.
- In an effort to improve the Nammo Group's IT security, the core network services in Europe are in the process of being certified in accordance with the ISO 27001 standard for information security management.
- Annual digital communication to employees about how to protect company intellectual property.

### TARGET 2020

#### Cybersecurity and proprietary information

- Continue to raise IT security awareness through e-learning training.
- Achieve ISO 27001 certification for Nammo Raufoss AS.
- Continue to improve capabilities to prevent and detect malicious software.
- Continue to create awareness about protection of intellectual property rights.







# CHAPTER 3: VALUE CHAIN INTEGRITY

To Nammo, value chain integrity means that all our business partners operate in an ethical manner that safeguards human rights and worker's rights while protecting the environment.

Our business partners include joint-venture partners, suppliers, sub-contractors, consultants, sales representatives, distributors, and customers. We are convinced that high value chain integrity produces high quality products and services, thereby increasing our competitiveness.

Our supply chain consists of suppliers of raw materials and components, sub-contractors, and providers of various services such as transportation and freight forwarding, maintenance, and consulting. As a general rule, local suppliers are to be sourced if competitive. Most of our suppliers are located in Europe and North America with a few suppliers in Asia and South Africa.

We estimate to have more than 7 000 registered suppliers, of which close to 500 are strategic. A strategic supplier can be a supplier pre-qualified by the end-customer or one who sells goods with high quality and/or high technological content at competitive prices.

## Supplier governance and social practices

Nammo's Ethical Code of Conduct and Supplier Conduct Principles state our requirements and expectations for business practices, personal conduct, and working conditions to our business partners. The principles are founded on the UN Global Compact's ten principles and the International Labor Organization (ILO) conventions. All business partners are required to comply with these guidelines and with applicable national and international laws.

The Supplier Conduct Principles were revised in 2019. They specifically address the supplier's obligation to conduct business in compliance with modern slavery and human trafficking legislation. Environmental requirements are also stated, committing our suppliers to minimize their negative environmental impact, continuously improve their environmental performance, and prevent and mitigate environmental and health-related risks. In particular, suppliers are required to:

- comply with all applicable child labor laws, and set employees' working hours and pay in

accordance with local legislative requirements,

- not engage in or support the use of forced or compulsory labor,
- not procure work or service from any person under the threat of any menace,
- allow employees reasonable notice to leave their employment,
- not insist that employees must surrender ID papers or work permits as a condition for employment,
- encourage the development and diffusion of environmentally friendly technologies, and
- act in accordance with relevant local and internationally recognized environmental standards.

## Supplier due diligence and control

Each of Nammo's legal entities and business units is responsible for undertaking appropriate due diligence on its respective suppliers to ensure all suppliers offered contracts meet Nammo's standards. We have a risk-based due diligence process in the selection and use of business partners. The degree of due diligence depends on the type of business partner, the country or countries involved, the size and nature of the transaction, and the historical relationship with the third party.



Joint ventures and industrial partners are evaluated on anti-bribery and corruption using a risk-based approach. For the selected partner, a full risk-based anti-bribery and corruption due diligence review is performed in accordance with the company processes involving the legal and compliance departments.

All our business partners receive and are obligated to observe Nammo's Ethical Code of Conduct upon signing a contract with us. Additionally, all third-party sales representatives must complete the monthly e-learning program on ethics and IT security. Nammo also requires all external board members and special consultants to sign the Ethical Code of Conduct and participate in the monthly e-learning awareness program on ethics and IT security. During 2019, Nammo had 33 sales

representatives representing the following regions: Europe, North America, South America, South East Asia Middle East and South Africa. All sales representatives undergo the company's due diligence procedure. If they are approved they are only allowed to operate in accordance with a written agreement with Nammo. All representatives are re-evaluated every second year and are under continuous monitoring.

Nammo performs regular audits of the supply chain in order to review quality and compliance with the Supplier Conduct Principles and how flow down is handled throughout the supply chain. All suppliers must fill in a self-assessment questionnaire when being contracted. Suppliers considered critical to Nammo are every second year subject to a self-assessment questionnaire. A supplier

can be classified as critical based on several criteria such as the size of the company, its geographic location, and whether it is a sole source or provides a critical component. Suppliers are vetted against various lists, including sanctions lists and lists identifying red flags, including debarments.

Nammo is committed to cooperating with suppliers to ensure that they have appropriate ethical and responsible policies and practices in place and to supporting them in closing any gaps the self-assessment may identify. We are currently developing a global framework to improve third-party risk management which will be implemented in 2020.

## STATUS 2019

### Value chain integrity

- No issues of negative social impacts in the supply chain were registered.
- Third party sales representatives had 90% completion rate of the monthly e-learning program on ethics and IT security.
- The Supplier Conduct Principles were revised.

## TARGET 2020

### Value chain integrity

- Implement a new risk management tool and an overall risk management process to further strengthen supply chain due diligence.
- Review flow down requirements of suppliers, focusing on sustainability-related expectations.

# CHAPTER 4: EMPLOYEE SAFETY AND WELL-BEING

Nammo's success relies on the highly skilled people working in our company. Ensuring our employees' safety, well-being and development is therefore a key priority for us.

Nammo is dedicated in its focus on ensuring a secure and safe working environment for its employees. Our operators can be exposed to occupational health and safety risks, meaning tailored governance and management systems are required to reduce the risk of harm. We strive to have a just and modern working environment where our employees are valued and supported.

Throughout 2019, we have focused on competence development and diversity. We are pleased to see that the turnover rate in the Nammo Group is low, indicating a good working environment.



	Permanent employees	Temporary employees
Germany	148	7
Switzerland	12	0
Spain	153	7
Finland	335	5
Sweden	264	23
Norway	791	0
US	573	16
Australia	1	0
India	1	0
Ireland	22	3
UK	43	0
Total	2 343	61

Total number of employees by December 31, 2019: 2404

## OCCUPATIONAL HEALTH AND SAFETY

Nammo's employees are exposed to health and safety risks related to handling energetic materials, mechanical manufacturing, heat treatment, chemical surface treatment, and assembly operations. Health, Environment, Safety, and Security (HESS) matters always have the highest priority, even if there is a conflict with other business objectives.

Nammo's occupational health and safety management is based on the legal requirements of each of the 12 countries where we are located. The HESS policy provides guidelines for how our employees shall handle health and safety issues in their workplace. It includes systematic follow-up and reporting of all dangerous conditions, near misses, and accidents. The policy is reviewed

annually and applies to all employees at all our sites; however, it allows for local adaptations to comply with national and local requirements.

Each site has its own system and policies in accordance with national regulations regarding how to report work-related hazards and hazardous situations, instructions for workers to remove themselves from potentially

hazardous situations, and access to non-occupational medical and healthcare services.

The Board of Directors carries the overall responsibility for HESS, which includes ensuring that the appropriate management and control systems are in place. The HESS director is responsible for administering the occupational health



## Chapter 4 Employee safety and well-being

and safety system in daily operations and reports directly to the CEO. The HESS director is tasked to ensure that all employees are given adequate information and training to perform their work in accordance with applicable regulations and policies. An HESS audit is performed annually at each operating location.

Each site has its own form of HESS committee or Safety Council that meets regularly. Employee representatives participate in these meetings to ensure that production staff members' input is heard in order to contribute to the overall site occupational health and safety culture. Results from these meetings are shared openly.

Annual seminars with relevant personnel and management are organized to review incidents in order to identify trends and develop risk mitigation strategies as well as raise the HESS staff's general level of knowledge.

Reducing both the total number of lost time injuries (LTIs) and the LTI value (LTIs per 1 million working hours) has been, and will continue to be, a priority for Nammo.

Our HESS management system is based on ISO 45001, which aims to reduce occupational injuries and diseases, and the ISO 31000 standard on risk management. All workers, activities, and workplaces in Nammo are covered by the occupational health and safety management system.

All employees engaged in the handling and storage of potentially hazardous substances receive annual physical checkups to monitor any changes that could result from working in proximity to such substances. This is part of Nammo's efforts to ensure occupational health and safety.

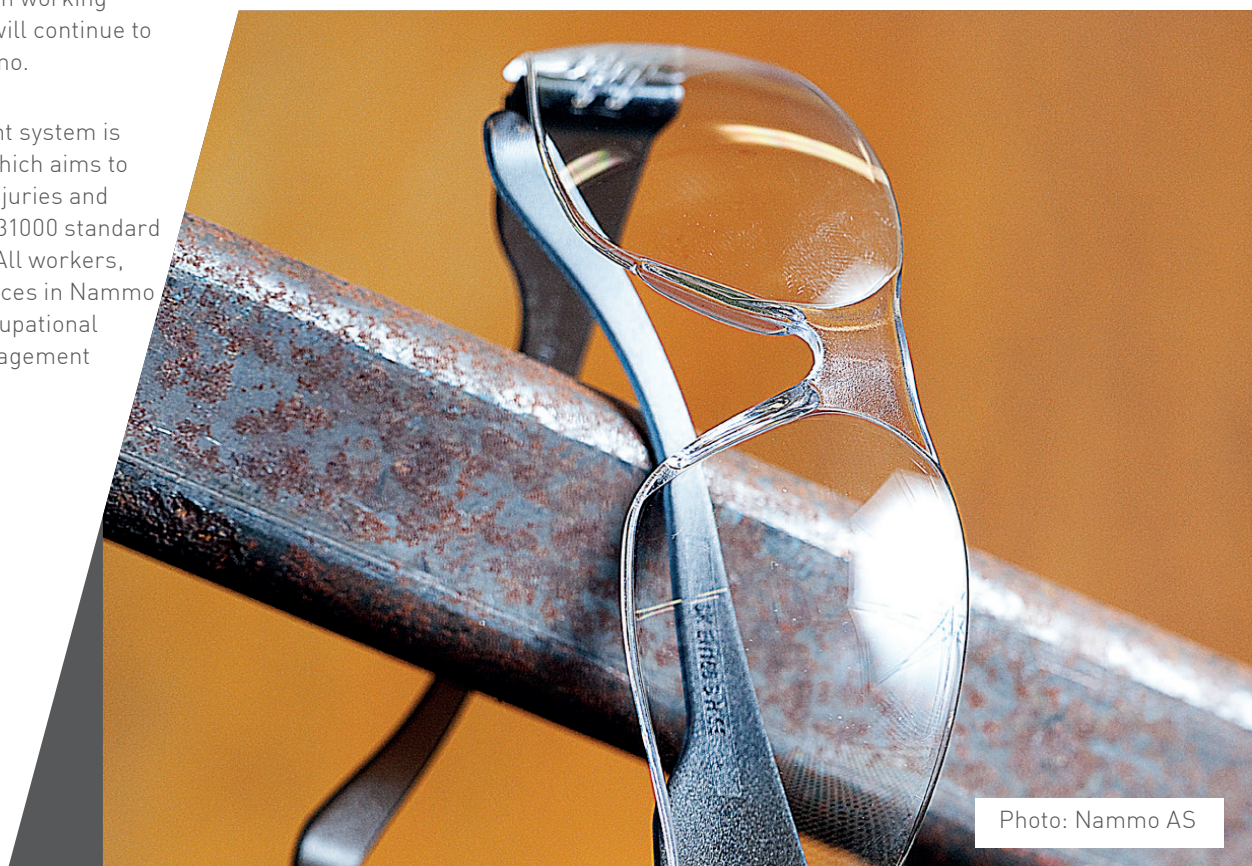
The system allows for the identification and evaluation of hazards, which in turn aids us in determining risks and proposing mitigating actions.

Monthly reports are collected from all sites. Hazard analyses are reviewed any time there is a change in procedure, equipment, or staffing to evaluate possible effects to the overall risk picture. Each site is required to review risk analyses every five years if no changes have been made (with some countries requiring reviews more often).

The quality and competence of the personnel carrying out risk analyses is assured by annual audits conducted by the Group HESS director and continuing training conducted during the annual HESS seminars. Annual reviews during HESS audits are used to evaluate and continually improve the occupational health and safety management system.

LTI's are reported to the Group HESS director using an accident report template requesting information about the root cause analysis and actions taken at the site to prevent reoccurrence of similar hazards. High-potential near misses and accidents are shared throughout the company via a "safety flash" format to summarize facts and findings about a particular incident to promote organizational learning.

Workers can submit reports anonymously via the Nammo Group SpeakUp reporting system in Europe, and a similar system will be implemented in the United States.



## Chapter 4 Employee safety and well-being

Reprisals against whistleblowers are explicitly prohibited as stated in our Ethical Code of Conduct. Occupational health and safety training is conducted during the onboarding process for all new employees. Each site has an annual training plan to cover specific work-related hazards, hazardous activities, and hazardous situations. Training is delivered through a mix of web-based solutions and face-to-face training. All training is conducted during working hours in each site's native language; attendance is recorded,

and feedback is requested to ensure that training is relevant and up to date. Each site's annual occupational health and safety training plan is reviewed during the annual Group HESS audit.

Twenty-four Group HESS audits were completed at Nammo's facilities in 2019. Annual audits are conducted in accordance with the procedure developed by the HESS director. Highlights from the annual audit agenda include the following areas:

- Governing policies, directives, and regulations.
- HESS targets and plans.
- Information on accidents, high-potential near misses, and observed trends
- Training and education.
- Internal HESS routines for HESS.
- Audits and documentation.
- Risk analyses, emergency planning and exercises.

Number of fatalities	0
Number and rate of high-consequence injuries	0
Number and rate of recordable work-related injuries	28 lost time injuries (LTI) for an LTI Value of 6.3
Total number of hours worked	4 481 924
Main types of work-related injuries	Slips and falls, hand/finger injuries, and back injuries were the most common LTIs in 2019.

### STATUS 2019

#### Occupational health and safety

- No life-threatening injuries or fatalities were reported. This is consistent with performance and maintained improvements since 2017.
- There were two reported cases of contact dermatitis at sites working with resins/glues. Personal protective equipment, exposure time, and procedures were reviewed and modified to alleviate the issues.
- Sick absence remained unchanged from 2018 at 3.7 percent.

### TARGET 2020

#### Occupational health and safety

- Enhance the HESS program structure at all Nammo's locations by requiring all employees responsible for HESS to complete Lean 6Sigma Green Belt training during 2020/2021.
- Reduce total number of LTIs by 25 percent (goal of 20 LTIs) while maintaining zero LTI vision; reduce LTIs related to improper use of personal protective equipment (PPE) from five in 2019 to zero.
- Reduce LTI Value by 25 percent from 2019 performance with a goal LTI value and LTI/million working hours of 5.
- Maintain a low level of sick absence (3.6 percent).



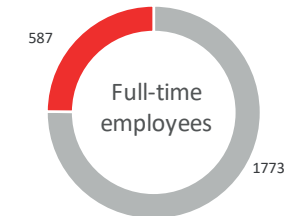
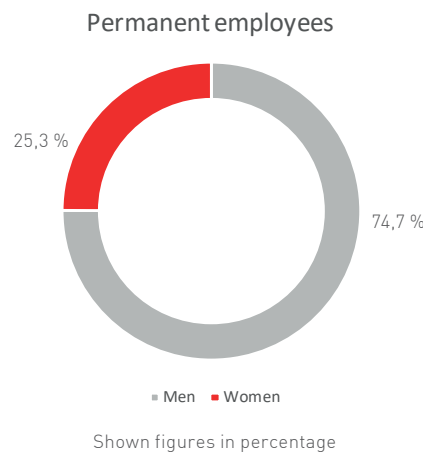
## ANTI-DISCRIMINATION AND DIVERSITY

Nammo is committed to creating a working environment that values diversity, is free from unlawful discrimination and harassment, and is based on the principle of equal opportunity and affirmative action.

Our Ethical Code of Conduct states that Nammo will not tolerate any form of harassment based on race, color, religion, religious affiliation, national origin, citizenship, age, gender, sexual orientation, marital status, disability, or any other such discriminating factors. This is also stated in our Human Resource Directive, which sets out to ensure that equal opportunities and rights are given to all our employees. Additionally, Nammo is subject to national security authorities' rules and regulations for personnel.

The Board of Directors carries the overall responsibility to prevent discrimination from occurring and to ensure that Nammo has a diverse workforce. These areas are managed by the Human Resource (HR) department and led by the Senior Vice President Human Resources, who is responsible for following up the operations through the local human resources managers on a monthly basis.

In the event of discriminatory behavior, we encourage employees to report the matter through their line management, HR or via our SpeakUp channel as instructed in our Ethical Code of Conduct. Nammo will not retaliate against any individual who, in a responsible manner, informs about possible breaches of our ethical guidelines, applicable laws or questionable circumstances in Nammo's business. Requests for anonymity will always be honored.



We are working actively through training and recruitment campaigns to increase the number of female employees and to motivate women to apply for management positions.

Several initiatives were established in 2019 to enhance competence development and diversity in the company, including the establishment of the Nammo Academy, leadership development programs, and an internal mentoring program.

### STATUS 2019

#### Anti-discrimination and diversity

- Women made up 25.3 percent of the total workforce.
- Women made up 33.3 percent of the Board of Directors.
- Women made up 25 percent of management.
- The Nammo Academy, leadership development programs, and an internal mentoring program were established.

### TARGET 2020

#### Anti-discrimination and diversity

- Achieve a measurable improvement in gender balance compared to 2019.
- Improve succession planning tool and relate to development.
- Start a new mentoring group.
- Start at least two groups for the leadership development program.

# CHAPTER 5: ENVIRONMENTAL STEWARDSHIP

Nammo has a direct impact on the environment through its production and testing of ordnance products and services, consumption of paper and energy, waste management, procurement, and use of transport. Compliance with laws and regulations is the minimum requirement; however, best practices should always be considered.

As part of new product development, any environmental issues are analyzed and resolved or reduced to the extent possible. In addition, conflict minerals and counterfeit materials are assessed. Flow down of requirements and related risk analysis within the supply chain are also conducted.

Initiation of Lean 6Sigma improvement projects to address any environmental issues is part of the mandate of each site's Business Improvement Team.

Over fifty percent of Nammo employees work at sites certified in accordance with ISO 14001, an internationally recognized standard that sets out the requirements for an environmental management system.

In 2019, no audits focused solely on environmental issues; nevertheless, environmental issues were reviewed as an agenda topic during the annual HESS audit at each of Nammo's sites. Our HESS directive requires all sites to review environmental improvement plans annually and report any nonconformities.

## CLIMATE RISK

The impacts of global climate changes are monitored and evaluated, and we have determined that climate change has only a minor impact on our facilities. Currently, only physical risks, and the consequential financial risks, are considered in relation to climate risks and opportunities.

One Nammo site is considered to be threatened by climate change risk. Operations in Bay St. Louis, Mississippi could be impacted by rising sea levels and more intense storms. Potential impacts of this risk include an interruption of operations and the need to relocate operations to another Nammo site within the United States. Consequential financial risks are associated with potential business interruption and capital expenditures to purchase/move equipment to a new operating location.

Distribution pattern of muddy fresh water from the Mississippi River as it flows into the Gulf of Mexico. New Orleans. Colorful collage. The elements of this image furnished by NASA. stock photo. USA, Aerial View, Beauty, Blue, Chandelier

## WASTE AND HAZARDOUS MATERIALS MANAGEMENT

Our company consistently monitors the handling of our hazardous material to ensure we are in accordance with national environmental laws and regulations. All Nammo sites must comply with the European REACH regulations (Registration, Evaluation, Authorization and Restriction of Chemicals), which aim to protect human health and the environment from risks posed by chemicals.

Waste is handled in accordance with national laws and regulations at each operating location. Our goal is to minimize the amount of waste destined for landfills by delivering waste for recycling or combustion with energy recovery. At Nammo, we continuously monitor actual and potential accidental release of hazardous substances that could affect human health, soil, and water.

REACH impacts all Nammo Group sites and efforts are underway at all sites to work proactively in identifying substitute substances and materials that minimize potential harm to human health and the environment. Downstream customers are informed of all candidate list substances exceeding REACH defined thresholds in Nammo products in accordance with REACH reporting requirements.

## EMISSIONS

In Nammo, we follow up and measure waste emissions to water and the atmosphere, work to reduce noise levels, and handle other environmental factors in accordance with existing regulations and internal instructions.

We currently face some environmental challenges related to following up historically polluted areas at two sites. This is considered to be under control and is being followed up through internal plans for improvements and in close cooperation with national authorities.

Emissions to air are reported according to the Greenhouse Gas (GHG) Protocol as scope 1, 2, and 3 emissions.<sup>1</sup>

	TCO2-E
SCOPE 1: Direct emissions from sources owned or controlled by the company	1 641.55
SCOPE 2 <sup>2,3</sup> : Indirect emissions from purchased electricity	25 436.22
SCOPE 3 <sup>4</sup> : Indirect, upstream sources not owned or controlled by the company	4 138.18

GHG emissions intensity ratio calculated for total emissions amounts to 6.15 kg/CO2e per 1 000 NOK revenue.

<sup>1</sup> Calculated based on emissions from air travel and emissions data from all production sites, with the exception of SN Technologies (SNT), Nammo UK (Westcott site and Cheltenham site), Nammo Ireland, and MAC LLC in Bay St. Louis, MS, USA. Nammo will aim to report emissions from all production sites in next year's reporting.

<sup>2</sup> Location-based scope 2 emissions.

<sup>3</sup> Emission factors for purchased district heating are calculated based on an average of country level publicly available emissions factors. For Spain, the emission factor for purchased electricity are used for calculating district heating emissions as well.

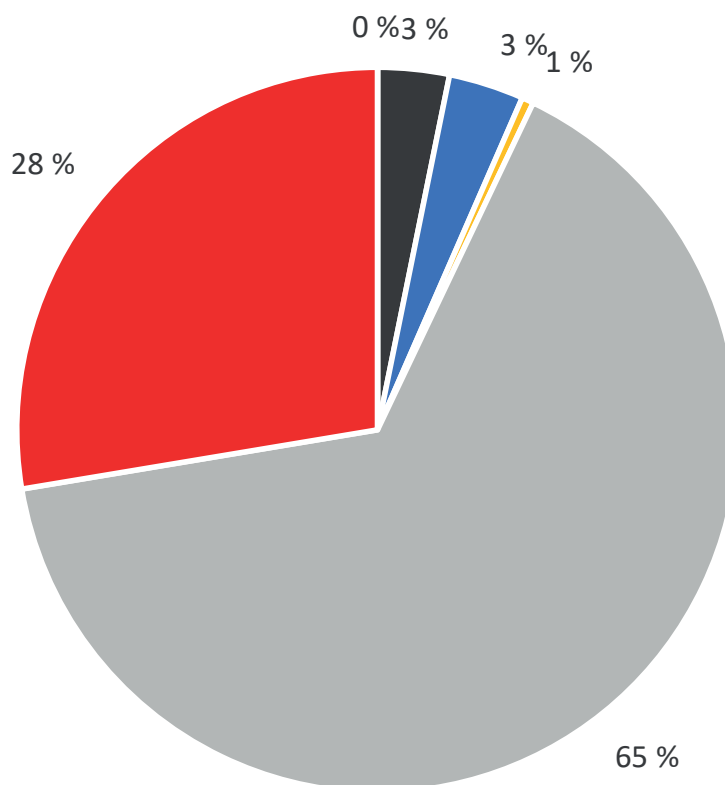
<sup>4</sup> Calculation of emission from waste is based on best estimate given available information and established emission factors. For hazardous waste, the emission factor used is based on the average emission factor for similar waste types.

## ENERGY USE

Energy efficiency measures provide economic and environmental benefits. For this reason, reducing energy consumption and energy conservation measures are a high priority at all sites. By using alternative energy sources, Nammo has already made significant cost savings.

All sites shall have at least one energy saving, water conservation, or other environmental impact reduction project. Project status is reviewed during annual Nammo Group HESS audits.

### Energy consumption at production units



- Fuel oil
- Natural gas
- Diesel and petrol
- Purchased electricity
- Purchased district heating
- Purchased district cooling

Reported energy consumption at our production sites was about 102.13 GWh in 2019.

Consumption of fossil fuels counted for 7 percent, purchased electricity 65 percent, and purchased district heating about 28 percent.

## WATER MANAGEMENT

The Nammo Group operates at 28 production sites in 9 countries. There are wide variations in water consumption requirements and associated impacts related to this consumption based on the type of production at each site. All sites comply with national and local regulations regarding water effluent quality, discharge, withdrawal, consumption, and impacts from runoff. The Nammo Group does not have internally developed water quality standards or guidelines; we adhere to national and local requirements at each of our sites.

Currently, each site analyzes its water consumption annually and works to identify ways to reduce consumption. Where water consumption is an issue, the sites engage with local stakeholders. The Nammo Group has an overall goal of reducing water consumption at each site year-over-year, and progress is reviewed during annual Nammo Group HESS audits.

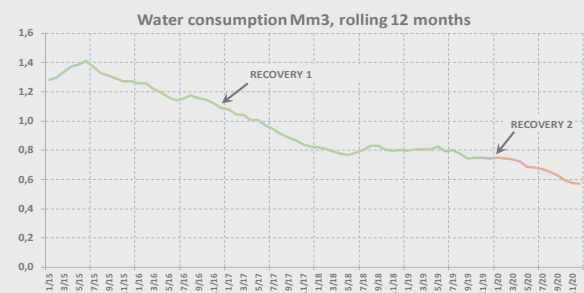
Total water consumption from all production sites amounts to 1 710.26 megaliters.

Recovery 2 investments at Vihtavuori will enable Nammo to close the ether factory's cooling water circuit which utilizes water from Lake Siikajärvi, thereby decreasing water consumption at the factory by more than 250 000 cubic meter annually. The equipment includes a massive heat pump, which recovers heat from the cooling water circuit to be reused in the district heating network in the nearby area.

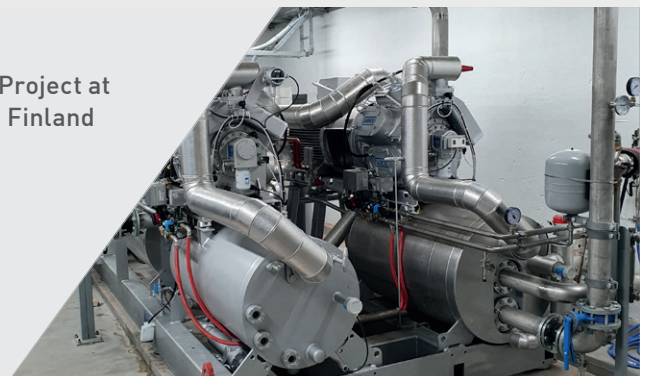
For a total investment of approximately Euro 600 000, Nammo Vihtavuori estimates annual energy savings of approximately 2 000 MWh, which is roughly equivalent to the annual energy consumption of 100 family homes. As a result of the energy savings, CO<sub>2</sub> emissions should be reduced by approximately 590 metric tons, which is

roughly equivalent to the CO<sub>2</sub> emissions created by driving 5 million km with the average car.

The factory's total energy consumption will be reduced by 5 percent and water consumption will be decreased 55 percent compared to 2015.



Water Consumption Project at  
Nammo Vihtavuori, Finland



### STATUS 2019

#### Water management

- Nammo experienced no compliance violations of environmental legislation.
- No significant spills were recorded.
- Data was collected to establish a baseline for comparison when establishing future KPIs.

### TARGET 2020

#### Water management

- Conduct a company-wide climate risk and opportunities assessment
- Define clear reduction targets for Nammo's environmental footprint in 2030 to support Sustainability Strategy.



# CHAPTER 6: PRODUCT STEWARDSHIP

**Nammo believes that responsibility for a product starts during the innovation process. We focus strongly on the use of environmentally friendly materials in our production lines and processes.**

For existing products, issues are evaluated and addressed through design and process failure mode and effects analysis (DFMEA's and PFMEA's) and value stream mapping (VSM). For new products, all aspects of health and safety are analyzed and problems are eliminated or reduced to the extent possible during the development process.

## Life cycle management

Nammo takes responsibility for the entire product life cycle, providing recycling and environmentally controlled disposal of obsolete munitions and propulsion systems for various customers around the world. All processes meet strict environmental standards, minimizing emissions to air and water.

When relevant, surveillance programs are established to check the conditions of munitions and propulsion systems during their lifetime. The purpose of such programs is to evaluate functionality and whether the product is still safe to store, handle, and use.

All our products must be able to meet stringent national, international, aerospace and military standards. Compliance with these requirements results in products exhibiting high performance, safety, and top quality.

## Safe disposal

The demilitarization market has changed fundamentally over the past few years, and Nammo had to change accordingly. Unfortunately this led to reductions in staff and the closure of one of our facilities in Germany, but we still believe there is a place in the market for our demilitarization operations in Sweden and in Norway. They will ensure that we will continue to offer our highly specialized demilitarization services to the international market.

Since Nammo was founded in 1998, we have remained a significant player in the European demilitarization market. Nammo has specialized in offering safe and environmentally friendly dismantling, recycling, or destruction of old or obsolete munitions. Since the signing of the Convention on Cluster Munitions in 2008, this has included thousands of tons of decommissioned cluster munitions from Cold War stores across Europe. Now the final remnants of these stores are all but gone. A significant part of this work has been done by Nammo's demilitarization businesses in Germany, Sweden and Norway. This has been a major undertaking, and one that our employees have completed with incredible skill and commitment. Nammo is proud of the significant role we have been playing in the work to environmentally friendly dispose off a large part of the western worlds cluster munitions.

Photo: Nammo AS





Nammo's presence in the space sector was initiated through participation in the European Space Agency's Ariane 5 project in the early 1990s. Nammo will also be involved in the new European launchers Vega and Ariane 6. On Vega, Nammo will replace the existing hazardous rocket motors for attitude control with non-hazardous rocket motors using a sustainable propellant. The technology behind these small thrusters that use H<sub>2</sub>O<sub>2</sub> (hydrogen peroxide) was developed by Nammo to replace the motors on scientific rockets with sustainable alternative. This new generation of hybrid rocket motors is suitable for scientific sounding rockets as well as for the upcoming new class of micro-launchers. Collectively, these activities have led to Nammo's participation in development projects for future Moon missions utilizing our expertise to develop a new generation of high performance rocket motors based on sustainable and possibly locally sourced propellants enabling sustainable presence on the Moon or Mars.

## STATUS 2019

### Product Stewardship

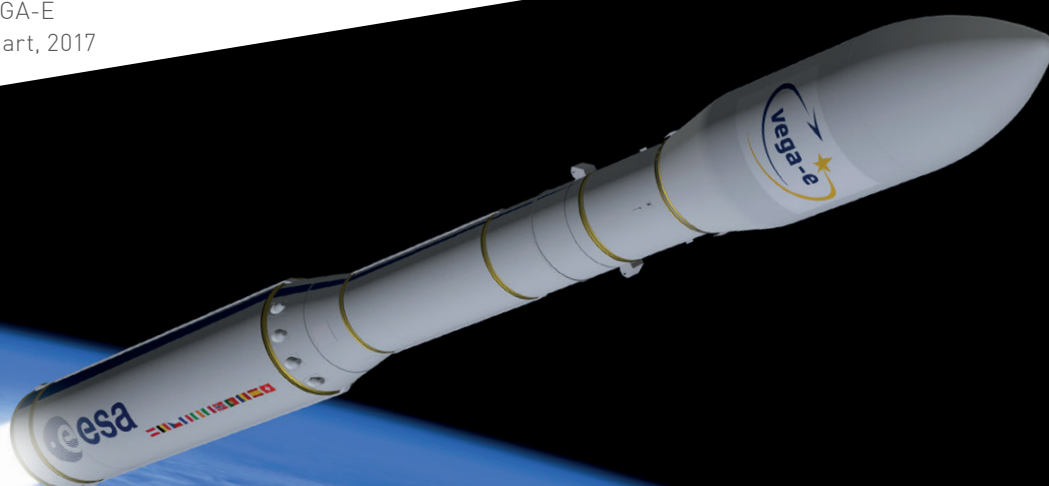
- There were no incidents of non-compliance concerning the health and safety impacts of our products and services.

## TARGET 2020

### Product Stewardship

- Start implementing sustainability into product related processes by minimizing our product's environmental impact throughout all stages of the product life cycle.

Photo: Artist view of VEGA-E  
© ESA-Jacky Huart, 2017



COMMUNICATION  
ON PROGRESS



This is our **Communication on Progress** in implementing the Ten Principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

For more information about sustainability in Nammo  
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