ENVIRONMENTAL TEMPLATE GUIDELINES

1.1 ENVIRONMENTAL REPORTING PRINCIPLES

These guidelines are intended to provide the necessary background information for the reporting of the environmental performance by the companies and divisions of Damen worldwide.

Measuring and reporting of environmental performance will help Damen:

- benefit from lower energy and resource costs,
- gain a better understanding of exposure to the risks of climate change and
- demonstrate leadership, which will help strengthen our green credentials in the marketplace and generate business opportunities.

Using a standardized reporting format is key to ensure that data received from different divisions and operations is comparable. Ideally, environmental reporting should be integrated into your existing reporting processes.

1.1.0 BASIC PRINCIPLES

Reporting at Damen consists of the following principles.

ACCURACY: All submitted data must be accurate, it is important to be able to justify all the data that is provided and to keep records for verification and validation.

CONSISTENCY: Data must be reported consistently, in line with this guidance and consistent in time. Data sources should not be changed without justification and an in-depth analysis of the necessity to modify previously provided data.

COMPARABILITY: Data must be delivered conformed to this guideline in order to be comparable between the Damen entities and the generally accepted KPI's outside Damen.

1.1.1 BOUNDARIES

All Damen companies, production related or not, should report their environmental performances. The Damen companies include the companies which Damen has financial or operational control.

FINANCIAL CONTROL:
ability to direct the financial and operating policies of the operation with a view to gaining economic benefits from its activities.

OPERATIONAL CONTROL:
organization or one of its subsidiaries has the full authority to introduce and implement its operating policies.

1.1.2 REPORTING PERIOD

The data should be made available on a quarterly basis, two weeks after the last month of the quarter. At this date, the KPI will be updated, analyzed and send to management. This means:

COMPLETED DATA TEMPLATE FOR YARD	DATE DUE	WHO
Q1	April 15th	Reporting manager
Q2	July 15th	Reporting manager
Q3	October 15th	Reporting manager
Q4	January 15th	Reporting manager

1.1.3 KEY PERFORMANCE INDICATORS

Reporting will be done on the following key performance indicators:

1. Greenhouse gases (1.2.1)
2. Energy (1.2.1)
3. Water (1.2.2)
4. Waste & materials (1.2.3)
5. Pollutants to air, land and water (1.2.4)

To gain insight in Damen's performance in these KPI's an environmental reporting template has been distributed to the companies.

1.2 ENVIRONMENTAL REPORTING TEMPLATE

For the correct measurement of the environmental data at your site Damen Group has provided an Environmental form in SnagR. Completing this template ensures that all relevant environmental data for Damen is collected.

The template consists of crucial data components (must haves), and degrees of freedom for additional information (nice to haves). In this paragraph, all items of the template are explained.

1.2.0 BASIC PRINCIPLES

An important figure is the amount of **manhours per FTE**[1] in your country. This is dependent on the number of normal workhours per week, and the number of workdays per year at your site. Regional differences can occur here due to different holidays, employment contracts etc. If this value is unknown, please use 2.080[2] hours as a value. Please consult your HR department for these numbers.

This number will be used to calculate the number of FTE and will be used as a relative factor for all environmental data. Meaning that the data is displayed in absolute values [ton CO2] and relative values [ton CO2/FTE].

The following information for calculation should be provided via Monthly Report: a distinction is made between FTE's for office-workers, production-workers and subcontractors. If a situation occurs that there is a production or office-worker that is also a subcontractor, please make sure that you allocate these numbers to the subcontractor category. It is especially important that numbers are allocated only once, so that no manhour is double counted.

Please make sure the Monthly Reports are filled in on time, thus the data is available for calculation.

[1] 2nd line in the 'General information' part.
[2] Based on a 40-hour workweek and 52 weeks per year.

1.2.1 GREENHOUSE GAS EMISSIONS & ENERGY

In the reporting template, paragraphs 1.1, 1.2 and 1.3 are used to collect data related to energy and Greenhouse Gas (GHG) Emissions. In each paragraph, data regarding a different **scope**[3] of GHG-emissions is collected. The scopes for accounting GHG-emissions are:

SCOPE	EXAMPLE
Scope 1: Direct emissions that the employees of Damen influence directly.	When the heating goes on, natural gas is immediately consumed.
Scope 2: Indirect energy emissions that the employees of Damen do influence but where emissions take place in a different location, for example when purchasing their energy.	When the light comes on, the power of the power plant, where the final emissions take place.
Scope 3: Indirect emissions that the employees of Damen can partly influence and take place elsewhere. These are supply-chain activities such as the purchase of products and services by the Damen (upstream) and the impact of the products manufactured or designed by Damen (downstream). The emissions are an indirect result of choices by Damen but do not take place within Damen.	When Damen employees take the plane for travelling, the final emissions take place at the airline company (upstream). When Damen designs a more eco-efficient ship, the owner of the ship has lower emissions (downstream).

Damen wants to create a complete overview on scope 1 and scope 2 energy & emissions. For scope 3, only business travel by private car and plane are considered.

1.2.1.1 SCOPE 1 DIRECT EMISSIONS

In paragraph 1.1 aspects that are related to scope 1 energy and emissions are collected. Below, each category is explained:

0. DO YOU HAVE ENERGY OR EMISSION REDUCTION INITIATIVES IN PLACE AT YOUR SITE?

Yes/No question. If you have a written document or policy to prove this, please elaborate about this in the comment section.

[3] According to the **GHG-protocol**.

1.2.1.1 SCOPE 1 DIRECT EMISSIONS

1. NATURAL GAS

Natural gas can come in different shapes or forms. By nature, we define natural gas as the fossil non-renewable, methane based natural gas that can be purchased as an energy carrier. If the type of natural gas differs from this (shale gas, town gas, biogas), please elaborate this at the comment section. Natural gas is reported in **normal cubic meters (Nm^3)**. If your utility reports natural gas in a different unit (for example BTU, Cubic Feet, boe), please use a natural gas unit converter[4].

2. MOBILE COMBUSTION – LEASE CARS

If your organization owns or leases vehicles, the fuel consumption must be reported here. Important exclusions are:

- Private owned vehicles by employees.
- Electric vehicles, their fuel (kWh's) is reported at scope 2.

Important is to report the liters of fuel (gasoline, Diesel and/or LPG). Again, if your supplier of data is providing different units (gallons for example) use a unit converter to convert to liters and elaborate the conversion in the comments.

3. MOBILE COMBUSTION – OTHER

At this section, fuel consumption from other sources is reported. This can mean for example:

- Forklifts
- Cranes
- Cherry pickers
- Generators
- …

It is important to explain the source of the fuel consumption in the comments.

4. MOBILE COMBUSTION – VESSEL FUEL CONSUMPTION – COMMISSIONING & TRIALS

Commissioning & trials are an important aspect of our work at Damen. Here we test and certify vessels. The fuel consumption of the vessels is therefore scope 1 for Damen. In this section you can complete the amount of marine fuel that is consumed while the vessel is under the control of Damen, for example during commissioning and trials.

[4] See this website as an example.

1.2.1.1 SCOPE 1 DIRECT EMISSIONS

5. PROCESS EMISSIONS

Process emissions are specific process gases that escape during the production process. Examples of these gases are:

- Acetylene
- Corgon
- CO2
- Euromix
- Propane

Each gas has a specific emission factor. Procurement information on the amount of process gases, if available, is the best source to estimate the amount of process gases used. Please elaborate which source of information is used in determining the total amount of consumed gases.

6. FUGITIVE EMISSIONS

Refrigerants are very potent GHG-gases. By repairing or refilling air-conditioning or cooling units, often refrigerants are being consumed. The service provider is required to provide information on the number of refrigerants used.

1.2.1.2 SCOPE 2 INDIRECT ENERGY EMISSIONS

In paragraph 1.2, aspects that are related to scope 2 energy and emissions are collected. Below, each category is explained:

0. INTRODUCTORY QUESTIONS

The first three questions help to scope the amount of data that must be collected. For example, if there is no consumption of heat and/or cold, 2.1 does not need to be completed.

Do you generate electricity at your site?
If there is electricity generation capacity available **at your site** (PV-panels, wind turbines, diesel generators etc.) Please answer yes, if you don't have any installed capacity, answer no.

1.2.1.2 SCOPE 2 INDIRECT ENERGY EMISSIONS

Do you consume or generate Heat or Cold (GJ) at your site?
Consumed heat of cold can come from different sources. Here we mean heat or cold energy that is directly generated on site or purchased from a third party. If your buildings are connected to heating of cooling infrastructure this does count. If you generate heat directly from burning fossil fuels on site, this doesn't count. In that scenario you need to report the primary fuel that is consumed.

Do you consume Steam at your site?
For steam, the same principle is applied as for heat and cold. If the steam is generated on site by burning fossil fuels, please only report the fossil fuels. If you buy steam from a third party or neighboring industrial facility, please report it here.

1. ELECTRICITY

Purchased and generated electricity is reported in kWh. Your utility or energy-meters will probably report electricity in the same unit. Important is to report the measured period and the source of the data as well. Ideally, we receive a division between warehouses, offices or production facilities. For electricity, it is also important that the origin of the electricity is reported. The origin means how the electricity is generated. If this is unknown, please report "none".

2. HEAT AND COLD

Purchased and generated heat and cold is reported in GJ. Your utility or energy-meters will probably report this in the same unit. Important is to report the measured period and the source of the data as well. Ideally, we receive a division between warehouses, offices or production facilities.

3. STEAM

Purchased and generated steam is reported in GJ. Your utility or energy-meters will probably report this in the same unit. Important is to report the measured period and the source of the data as well. Ideally, we receive a division between warehouses, offices or production facilities.

1.2.1.3 SCOPE 3 INDIRECT EMISSIONS

In paragraph 1.3, aspects that are related to scope 3 energy and emissions are collected. Below, each category is explained:

1. BUSINESS TRAVEL WITH PRIVATE CARS

Business travel with private cars is defined as distance travelled with private vehicles for business purposes. This is **excluding** commuting traffic. But includes all trips that have been covered where the covered mileage and corresponding expenditure can be invoiced to Damen.

2. BUSINESS TRAVEL BY PLANE

Business travel by plane should ideally be reported in three distance categories, short (<700km), medium (700-2.500 km) and long haul (>2.500 km). The reason is twofold. Firstly, the carbon intensity per km differs per category (a short-distance flight emits more carbon per km than a long-distance flight) and it shows which flight can be replaced by other modalities, like long distance train travel. If the division between distance is unknown, please fill in the total line.

1.2.2 WATER

0. DO YOU HAVE A WATER MANAGEMENT PROGRAM IN PLACE AT YOUR SITE?

Yes/No question. If you have a written document or policy to prove this, please elaborate about this in the comment section.

1. WATER WITHDRAWAL

In this section, all water that is withdrawn should be reported. This includes water that is directly withdrawn from the environment, and what type. If you only withdraw water from an external party, for example a utility, please use the category **third party water**. Note, this is not the same as water consumption, since you must report the amount of discharged water first.

1.2.2 WATER

2. WATER DISCHARGE

Discharged water is water that is returned to the environment, therefore not ending up in the production process. Please make sure that the same categories are used as in 1. Withdrawal. Out of the total discharged water, please note:

- The share of freshwater.[5]
- The share of polluted water.[5]

1.2.3 WASTE & MATERIALS

As an organization waste and its disposal represents a cost, so the measures you take to minimize waste can have a direct financial benefit as well as making your business more environmentally friendly. Resource efficiency measures, even basic ones such as reusing packaging and printing double-sided, can contribute to real savings.

It is NOT allowed to burn waste within the premises of a Damen yard. All waste should be removed and disposed by an accredited company authorized to do so.

All yards should produce, store, transport and dispose of waste without harming the environment:

- Store and transport your waste appropriately and securely so it does not escape and any hazardous waste is kept separately from other waste streams.
- Check that your waste is transported and handled by organizations that are authorized to do so. If a waste carrier takes your waste away, you may also need to check that the site it is taken to is authorized to accept it.
- Ensure that waste streams are identified, and records are kept of all transports.

[5] Freshwater = (≤1,000 mg/L Total Dissolved Solids), Polluted water = (>1,000 mg/L Total Dissolved Solids).

1.2.3 WASTE & MATERIALS

In the template, you can answer the following questions:

1. PLEASE ANSWER THESE QUESTIONS FIRST

a. Do you have a waste management program in place at your site?

Yes/No question. If you have a written document or policy to prove this, please elaborate about this in the comment section.

b. Do you have executed waste prevention measures?

Yes/No question. If you have a written document or policy to prove this, please elaborate about this in the comment section.

c. Are there activities undertaken to divert waste from landfill?

Yes/No question. If you have a written document or policy to prove this, please elaborate about this in the comment section.

1 & 2. PROVIDE THE TOTAL WEIGHT [TONS] OR VOLUME [M^3] OF YOUR MATERIAL CONSUMPTION AND WASTE.

The amount of material used is the total amount of material that is purchased and used in your production process. The amount of waste is the amount that is disposed of. These metrics show the material efficiency of our site.

1. Broken down into separate categories by weight of volume.

- Paper/ Cardboard
- Aluminum
- Metals
- Organic waste
  Organic waste is any material that is biodegradable and comes from either a plant or an animal. Examples of organic waste include plant waste, food waste, green waste and landscape and pruning waste. This excludes wood and paper/cardboard waste.
- Plastics
- Wood
- Others

2. The destination of the waste reported.[6]

[6] See also:
https://www.recycling.com/downloads/waste-hierarchy-lansinks-ladder/

Please contact your waste contractor for insight in where your waste ends-up.

a. Re-used
Reduce waste by reusing products and materials. Reusing and reducing go hand in hand. By reusing materials you also reduce the amount of waste. A form of reusing is up-cycling, these are environmentally friendly projects.

b. Recycled
Most waste can be recycled. Such as single streams of plastics, paper, and metals. Recycling is a (long) process where disposed items or waste materials are separated, collected and processed in order to manufacture an entirely new product. Recycling is a preferred option when waste can't be reused. It prevents the need for extracting raw or virgins resources.

c. Incinerated
Incineration is also a form of burning waste materials. But in this case no energy is produced by burning the waste. The purpose of incineration is to dispose waste in order to prevent it from being dumped on landfills.

d. Landfill
A landfill is a site for the disposal of waste materials by burying it in the ground. This is the last method of waste disposal and the least favored. Dumping waste on landfills only has disadvantages. It won't generate energy, it is heavily polluting and recycle resources materials can't be reused. Landfills are one of the causes of the amount of plastic waste in our oceans.

3. SPECIFIC HAZARDOUS WASTE

For this category, please also include other waste types that can be considered hazardous if you have these present on-site, we will probably elaborate this list in the future.

- Paint
- Thinners
- Oil
- Glue
- Others

1.2.4 OTHER POLLUTANTS

You should be aware of your organization's products, operations and processes and know whether any of these lead to pollutants and where these occur. Pollutants have a range of impacts and the effects are varied: emissions to air have negative impacts on human health and the natural environment; some chemicals bind to soil and act as long term contaminants, whilst others will leach into local water sources and contaminate water supplies.

Your reporting will be strengthened if you report on abatement technologies in place, any plans for substitution where feasible, or investments made to clean up your processes, whether this is ensuring your vehicle fleet runs on low sulfur fuel and has catalytic converters, or capture and collection methods or changes to your processes.

1. WHAT ARE THE TOTAL (NON-GHG) EMISSIONS TO AIR, SOIL & WATER?

Here you should give an overview of the known pollutants coming from your company. Here it is important to also provide a comment on how the amount of pollutants are determined. The components are:

- Nitrous Oxide
- Particulate Matter (PM10 & PM2.5)
- Sulfur Oxides
- Acid and organic Chemicals
- Nutrients and organic pollutants
- Volatile Organic Compounds
- Metal Emissions

If these are unknown, please note this in the comment section, you also should provide information on which efforts have been taken to reduce the effect of the pollutant.

QUESTIONS

Please send all your questions to HSSEQ@damen.com.