 <b>Jan De Nul</b> G R O U P	CO2 Performance Ladder	3B2 REVISION 10
	Energy Management Action Plan	

<b>Date</b>	26/06/2020	01/09/2021	09/09/2022
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<b>Note:</b>	Update 2020	Update 2021	Update 2022

## 1. INTRODUCTION

In this Energy Management Action Plan (EMAP), we describe how Jan De Nul Group achieves CO<sub>2</sub> reduction targets and measures, as set by the Management Board, within the framework of its CO<sub>2</sub> performance ladder certification.


The <<Action list CO<sub>2</sub>PL>> has been updated with the results of the energy audits (1B2-Energy Audit Report YYYY) and additional energy assessments, such as

- Energy Roadmap: Jan De Nul NV  
Reference: 2016-P&S-3000436046 October 2016, which is still representative on the date of revision and can also be applied in the other buildings within the scope of CO<sub>2</sub>-PL certification;
- Heating audits on combustion plants conducted in the course of 2018;
- Engie photographic scans were performed in 2020.

The results of ship-related assessments include:

- increased awareness of rational energy consumption among sailing and operational personnel, a/o by communicating on actual consumption, optimisations, comparisons with similar vessels;
- technical measures such as the use of alternative fuels, the introduction of the Ship Energy Efficiency Management Plan (SEEMP) launched by IMO and related technical measures.  
SEEMP offers a specific action plan for the implementation of energy efficiency measures on board, such as routing and voyage planning, maintenance, oil analysis, bunker management, crew training, etc. Our department responsible for newly built vessels plays an important part in this;
- operational measures to increase productivity without increasing fuel consumption, thus minimising the use of energy per m<sup>3</sup> dredged.

The progress with regard to the reduction targets is regularly analysed in periodic progress reports and during the management review.

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For this EMAP, the following ISO50001 elements have served as a basis:

ISO 50001	CO <sub>2</sub> ladder	Deming	Jan De Nul
§6.3 Energy assessment	2A3	PLAN	Energy flows and CO <sub>2</sub> emissions can be found in the Carbon Footprint, GHG and progress reports  New savings opportunities are discussed within the scope of energy audits and (external) energy assessment studies and laid down in the Management Review and the Energy Action Plan (EMAP)
§6.2 Energy targets, assignments and action plans	B/2C2	PLAN/DO	JDN Policy Statement (--> website) JDN Code of Conduct Energy Management Action Plan List of measures on SKAO website
§6.3 Monitoring, measurements and analysis	3C1, 4B2, (5B2, 5C3)	CHECK	Half-yearly updating of Carbon Footprint, GHG and progress reports. Conducting internal and external (energy) audit, self-assessment, deliberation within steering group, management review.  The steering cycle that Jan De Nul NV has set up for its CO <sub>2</sub> policy includes the periodic measurement of CO <sub>2</sub> emissions and the periodic analysis of and reporting on our progress in terms of targets and measures. For more information, we refer to the Quality Management Plan and the Periodic Reports.
§ 6.3 Deviations, corrective and preventative measures	Continuous improvement	ACT	If deviations are found during the steering cycle, or if correction is required for any other reason, the CO <sub>2</sub> PL manager will coordinate adjustments in accordance with the steering cycle and activity description included in the Quality Management Plan

## 2. REDUCTION TARGETS

### 2.1 TARGETS AND MEASURES

Within the boundary of the CO<sub>2</sub> performance ladder certificate, Jan De Nul Group sets a number of targets in its annual management review based on feasible reductions identified in internal and external energy and also initiates the necessary actions in view of their realisation.


The targets are set annually during the management review (check 2B4-Management Review) and are described in the document <<Progress report>>, which is published on the website and also establishes specific measures. If necessary, details of the measures are listed in the document <<Action list CO<sub>2</sub>PL>>.

The progress of the actions is monitored in the relevant work and steering groups.

For projects with an award advantage, separate targets and actions may be formulated within the project. These are documented at project level and bundled in the project file.

### 2.2 MONITORING AND MEASUREMENTS

The progress in terms of targets and measures is analysed and reported on in periodic reports <<Progress report YYYY>>.

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## 2.3 DEVIATIONS, CORRECTIVE AND PREVENTATIVE MEASURES

If deviations are found during internal or external audits, or if correction is necessary for any other reason, the members of the QHSSE CO<sub>2</sub>PL team will coordinate through:

- organised steering and working group meetings by coordinating the actions as described in the action list;
- the drafting of findings within the internal audit process;
- the annual management review

If required, adjustments to relevant documents of the CO<sub>2</sub>PL management system are implemented.

## 3. CO<sub>2</sub>-RELATED INITIATIVES

Within the sector, Jan De Nul NV actively participates in work groups and CO<sub>2</sub>-related initiatives, thus staying abreast of reduction opportunities. The company not only takes part in initiatives but also initiates initiatives itself. Participation is described in <<CO<sub>2</sub>PL-Jan De Nul Overview of Initiatives 2D1-2D2-3D1-4D1-5D1>>.

In addition, the company also subscribes to a wide range of professional literature and social media so as to stay abreast of CO<sub>2</sub>-related initiatives.

The status of ongoing initiatives is discussed on a monthly basis within the relevant operational steering groups. Decisions on potential new initiatives are also taken within these steering groups.

## 4. TASKS AND RESPONSIBILITIES

In order to monitor the above objectives, measures and initiatives, the tasks and responsibilities captured in <<2C2- CO<sub>2</sub>PL-Jan De Nul-2C2-R3.0- Steering cycle and responsibilities>>.