

Document title:

PROJECT FILE

Project:

SUSTAINABLE MAINTENANCE DREDGING WORKS IN MARINE ACCESS CHANNELS

SPECIFICATIONS NO. MT/2554

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0.1	14/04/2023	Overview of year 2022	RL			
0.0	14/06/2022	First draft	DUY	RHA	BP	
Rev.	Date	Description of revision	Prepared	Checked	Approved	



0 INTRODUCTION

This project was awarded on 17.11.2021, with a duration of 18 calendar months, with the possibility of a one-time extension for a period of another 48 months. The award criterion 'sustainability and innovation' accounted for 15/100 points in the award of the contract:

- Emission parameters CO₂, nitrogen, particulate matter and sulphur (12/15)
- Tier standardisation (2/15)
- Level of CO₂ performance ladder (1/15)

The works started on 16 January 2022.

0.1 **PROJECT DETAILS**

Name	Sustainable maintenance dredging works in marine access channels
Description	Carrying out mainly maintenance dredging works using trailing suction hopper dredgers in the marine access channels in and towards the ports of Ostend, Zeebrugge and Antwerp, the marine access to the North Sea, the marine access from Wielingen to the Wintam sea lock, and in the marine access channels of the canal Ghent-Terneuzen.
Specifications number	MT/02554
Client	Flemish Government Mobility and Public Works Department Marine Access
Allocation decision	13 October 2021 (start of works on 16 January 2022)
Execution period	16.01.2022 – 15.07.2023

0.2 PARTIES INVOLVED

Jan de Nul NV has a 50% stake in the main contractor for this project 'TMSZ' (Tijdelijke Maatschap Schelde & Zee) and is responsible for:

- Deployment of trailing suction hopper dredger ('TSHD') and crew tender;
- Deployment of backhoe dredger ('BHD');
- Project management and daily management.

No subcontractors have been engaged.

0.3 DEPLOYED EQUIPMENT AND PERIODS OF DEPLOYMENT

Equipment	Deployment period	Abbreviation
Trailing suction hopper dredger Sanderus Crew tender DN97	16.01.2022 – 23.12.2022 (Q1 up to Q4-2022)	TSHD
Backhoe dredger DN40 + Cat 6015	16.01.2022 – 23.12.2022 (Q1 up to Q4-2022)	BHD
Trailing suction hopper dredger Tristão Da Cunha	14.11.2022 – 23.12.2022 Q4-2022	TSHD



0127 Sustainable maintenance dredging works

PROJECT DATA 1

IDENTIFICATION OF ENERGY AND EMISSION FLOWS [2A] 1.1

List of significant energy/emission flows:

Energy flow	Scope	
Fuel consumption of trailing suction hopper dredgers & crew tender	1	
Fuel consumption of backhoe dredger		
Power consumption of construction site shed	2	
Natural gas	1	

List of excluded energy/emission flows:

Energy flow	Reason		
Transport with cars (execution)			
Transport with cars (crew)	common parts		
Air miles (crew)			

Totaal	Scope 1	7,720	ton CO2
Totaal	Scope 1 & 2	7,726	ton CO2

		Totaal		Fractie Scope 1	Fractie Totaal Scope 1 & 2
Scope 1	Aardgas	0	ton CO2	0.0%	0.0%
	Brandstof schepen	7,720	ton CO2	100.0%	99.9%
	Brandstof firmawagens	op bedrijfsniveau	ton CO2	0.0%	0.0%
	Diesel (EUR) (LBP/intern Verkee	0	ton CO2	0.0%	0.0%
	Propaangas	0	ton CO2	0.0%	0.0%
	Totaal	7,720	ton CO2	100.0%	99.9%

				Fractie Scope 2	Fractie Totaal Scope 1 & 2
Scope 2	Airmiles	on hodriifeniyooy	ton CO2	0.0%	0.0%
	Brandstof privé-voertuigen	op bedrijisniveau	ton CO2	0.0%	0.0%
	Elektriciteit	3.7	ton CO2	58.8%	0.0%
	Aardgas	2.6	ton CO2	41.2%	0.0%
	Warmterecuperatie	0	ton CO2	0.0%	0.0%
	Totaal	6.3	ton CO2	100.0%	0.1%

0127 Sustainable maintenance dredging

works

1.2 CARBON FOOTPRINT AND TRENDS

1.2.1 REFERENCE CARBON FOOTPRINT

Based on the tender calculation, a reference carbon footprint was drawn up:



The total reference carbon footprint for this campaign amounted to 23,445 tonnes of CO₂.

1.2.2 ACTUAL CARBON FOOTPRINT OF PROJECT

Due to, amongst other things, the use of biofuels and operational optimisations, the total CO₂ emission amounted to a mere **7,726 of CO₂**, which is **67% lower than the reference carbon footprint**.











0127 Sustainable maintenance dredging works

1.2.3 COMPARISON EMISSION PROFILE ORGANISATION – PROJECT



Significant deviations:

- No scope 3 emissions on project
- 100% of the project's carbon footprint consists of emissions from vessels (trailing suction hopper dredger and crew tender). This is in line with the overall emission profile of dredging operations within Jan De Nul Group, with 90% to 99% of the footprint always being allocated to emissions from dredgers.



0127 Sustainable maintenance dredging works

1.3 FEEDBACK FROM PREVIOUS ENERGY AUDIT

1.3.1 **POWER CONSUMPTION AT SITE QUAY ZEEBRUGGE - DN97**

Following the previous energy audit, we retrieved the EAN number of the connection at the Zeebrugge site quay. On 1/7/22, the energy consumption was 100% green and of Belgian origin. A new verification on 12/4 yields the following results:

Groencheck – Is mijn groene stroom wel echt groen?



100% Groene stroom in december 2022

In december 2022 was uw percentage 100%. Uw leverancier diende voldoende garanties van oorsprong in als bewijs dat de elektriciteit die u verbruikte uit hernieuwbare energiebronnen kwam (zoals zon, wind, biogas, biomassa, waterkracht, ...).

Groencheck – Is mijn groene stroom wel echt groen?



Uw EAN-code : 541448860019516831 -

1.3.2 DN 97 ON BIOFUEL

The engine supplier confirmed:

- It is possible to run on 100% HVO •
- A Fame 20% blend is possible •



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Up to now, we have not yet sailed on biodiesel.

2 TRANSPARENCY

For the communication on our CO_2 performance, we refer to the cross-departmental communication plan << CO_2PL -Jan De Nul-3C2 – Communication plan >>.

Specifically for this project, we also communicate on the CO_2 performance, both internally and externally. The form of communication, stakeholders, parties responsible and frequencies are summarised in the tables below.

2.1 INTERNALLY:

Form of communication	Stakeholders	Person responsible	Frequency
Project introduction	Name & personnel	Employee performing the task	At the start of the works
Toolbox meetings	Name & personnel	Employee performing the task	Half-yearly
Monthly report	On-site project team	Employee performing the task	Monthly
BNL project meeting	Project team BNL	Employee performing the task	Half-yearly
Feedback in steering committee	Steering group BNL BAGGER	Ass. Area Manager	Monthly

2.2 EXTERNALLY

Form of communication	Stakeholders	Person responsible	Frequency
Project reporting	Client	Ass. Area Manager	Half-yearly
Publication of this project report on the JDN website	Interested stakeholders	Energy & Emissions QHSSE Advisor	Half-yearly
Social media: Linkedin, Instagram, Facebook **	Interested stakeholders	Ass. Area Manager	About 2x / project duration