

3168 – Bissegem Bridge

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**Document title:** 

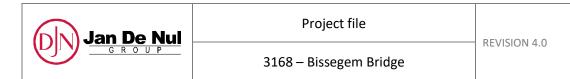
# **PROJECT FILE 2023**

**Project:** 

# SEINE SCHELDT LEIE RECONSTRUCTION OF ROAD BRIDGE BISSEGEMMARKE

# **SPECIFICATIONS NO. ABS-18-028**

Document no.: JDN3168.CO2 Project File Bissegem						
Prepared	Prepared by: GHG QHSSE Team					
Rev.	Date	Description of revision	Prepared	Checked	Approved	
4.0	26/12/2023	Update 2023	GOFL	JVQ	BERV	
3.0	10/02/2023	Update 2022	JVQ	RHA	BERV	
2.0	15/11/2022	Update 2022Q1&2	JVQ	RHA	BERV	
1.0	19/04/2022	Update	JVQ	RHA	BERV	
0.0	24/06/2021	Creation	STIA	JVQ	BERV	



#### **0** INTRODUCTION

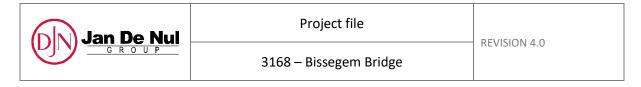
This contract entails works for the demolition of the existing concrete arched bridge over the Leie in Bissegem-Marke (connection Driekerkenstraat with Overzetweg), the construction of a new steel arched bridge at quasi the same location, the creation of a temporary bicycle and pedestrian bridge (full-fledged) with approach ramps (in accordance with the corresponding rules from the 'bicycle vademecum') during the works, the construction and relocation of sewerage (a/o Aquafin pipeline), the construction of road infrastructure connecting to the existing road infrastructure, the reconstruction of towpaths, including the realisation of connections to the existing towpaths and the realisation and maintenance of greenery.

#### 0.1 PROJECT DETAILS

ID data	
Description	SEINE SCHELDT. LEIE. RECONSTRUCTION OF ROAD BRIDGE BISSEGEM – MARKE.
Specifications no.	SPECIFICATIONS NO. ABS-18-028
Client	De Vlaamse Waterweg
Tender date	18/11/2020
Award date	30/11/2020
Execution period	270 working days
Estimated value without VAT	9,258,967.78 EURO
What role did CO₂PL play in the tender?	The tenderer could in its offer commit to achieving a certain $CO_2$ ambition. Setting a $CO_2$ ambition level in the tender results in a notional discount. By applying this notional discount to the offered price, the evaluation price is obtained, which is assessed in accordance with the award criterion "Price".
	For this contract, the tenderer could only select one of the following levels of ambition:
	None - 0% / Level 1 - 2% / Level 2 - 4% / Level 3, 4, 5 - 6%.
	The tenderers could in their offer commit to achieving a certain CO <sub>2</sub> ambition: <b>Level 3</b>

#### 0.2 PARTIES INVOLVED

JDN carries out demolition works, foundation works and concrete works. This includes: demolition of the existing road bridge, demolition of existing quay walls, installation of foundation piles for an abutment, installation of sheet piles for a new quay wall, construction of new temporary quay walls, construction of part of the new permanent quay wall, construction of an abutment. The foundation works and concrete works are executed on both banks.



This report covers the works carried out by JDN nv within the temporary partnership 'Road Bridge Bissegem-Marke'.

#### 0.3 DEPLOYMENT OF EQUIPMENT IN THE RELEVANT PERIOD

Equipment	Period (within the period covered by this file, half-yearly/yearly)
Cranes	Bandenkraan
	Sennebogen 643
	Kabelkraan SCX1500

#### 1 PROJECT DATA

#### 1.1 IDENTIFICATION OF ENERGY AND EMISSION FLOWS [2A]

List of significant energy/emission flows

Energy flow	Scope
Fuel consumption on the project site:	1
- Fuel consumption of heavy equipment used	
Power consumption on the project site	2

List of excluded energy/emission flows

Energy flow	Reason
Natural gas on the project site	No natural gas consumption on the project site for the
	period covered by this report.
Air Miles Crew (project personnel of	No air miles are awarded for this project.
partners).	

#### 1.2 CARBON FOOTPRINT AND TRENDS

#### 1.2.1 REFERENCE CARBON FOOTPRINT

There is no reference carbon footprint available.

#### 1.2.2 ACTUAL CARBON FOOTPRINT OF THE PAST PERIOD IN QUESTION

The on-site works were started in July 2021. The carbon footprint is shown in detail in the graph below. The project's actual carbon footprint amounts to 122 tonnes of CO<sub>2</sub>, of which 5 tonnes were emitted during 2023.



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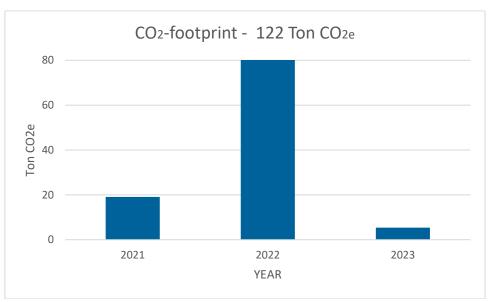


Figure 1: Carbon footprint Bissegem Bridge



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#### 1.2.3 EMISSION PROFILE OF THE PROJECT

The emission profile of the project is characterised by scope 1 and 2 emissions, mainly due to fuel consumed by heavy equipment.

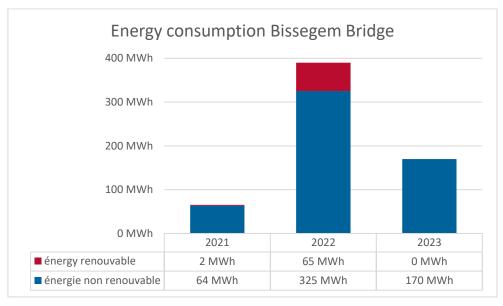


Figure 2: Energy consumption Bissegem Bridge

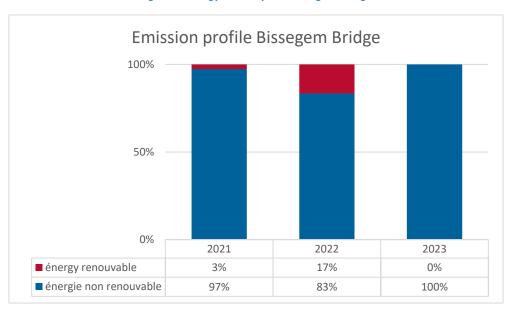


Figure 3: Emission profile Bissegem Bridge

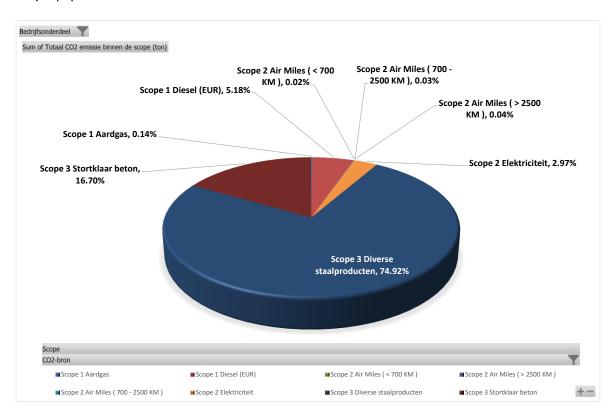


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#### 1.2.4 COMPARISON EMISSION PROFILE ORGANISATION - PROJECT

The emission profile of all civil construction sites is mainly determined by the procurement of various steel products and ready-mixed concrete. In this project, the steel and asphalt are purchased or produced by the project partners, and reported in their respective reports. For this reason, the emission profile of this project differs, as it is entirely determined by the scope 1 emissions of the heavy equipment.





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# 2 REDUCTION

# 2.1 LIST OF REDUCTION MEASURES FOR THIS PROJECT

Project no.	ACTIVITY	MEASURE	ТҮРЕ	A STANDARD	B PROGRESSIVE	C AMBITIOUS	APPLICATION ON THE SITE
3168-1	CONSTRUCTION, CONSTRUCTION- SITE	Purchase of green electricity and/or electricity with a Dutch Guarantee of Origin (GVO)	Sustainable energy	Less than 50% electricity for consumption at work (construction site) is green electricity and/or has a Dutch GVO.	At least 50% electricity for consumption at work (construction site) is green electricity and/or has a Dutch GVO.	At least 75% electricity for consumption at work (construction site) is green electricity and/or has a Dutch GVO.	Connection to the grid – Green electricity of local origin.
3168-2	EQUIPMENT	Monitoring of fuel consumption and number of running hours of individual mobile machines	Conducting activities more efficiently	Monitoring of fuel consumption for 25% to 75% of the number of mobile machines	Monitoring of fuel consumption for at least 75% of the number of mobile machines with online reading and analysis of fleet data	Monitoring of fuel consumption for at least 90% of the number of mobile machines with online reading and analysis of fleet data	The running hours of machines are checked each time by the technical team. The running hours are also reviewed when moving machines to another location.



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Project	ACTIVITY	MEASURE	ТҮРЕ	А	В	С	APPLICATION ON THE SITE
no.				STANDARD	PROGRESSIVE	AMBITIOUS	
3168-3	EQUIPMENT	Maintenance of equipment according to factory specifications	Integrated measure	The company can demonstrate that at least 25% of the equipment is serviced according to the factory specifications and maintenance programme	The company can demonstrate that at least 75% of the equipment is serviced according to the factory specifications and maintenance programme	The company can demonstrate that at least 75% of the equipment is serviced according to the factory specifications and maintenance programme; and it manages to optimise the setting of equipment with a high energy consumption so that it consumes less energy for the same works.	Maintenance of on-site equipment is performed according to factory specifications. There is a technical team overseeing this.
3168-4	EQUIPMENT	Electrification of hand tools	Electrification	Wherever possible, the company uses electric hand tools instead of fuel- powered hand tools.	Demonstrable policy replacement/introduction of electric hand tools instead of fuel-powered hand tools.		Small devices or low- power devices such as drills or glue guns run on batteries.
3168-5	EQUIPMENT	LED lighting					The site is illuminated with LED lighting

Source: List of measures taken by Jan De Nul, submitted periodically to SKAO

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# 2.2 OTHER MEASURES THAT ARE ONLY APPLICABLE TO THIS SPECIFIC PROJECT

All measures have been included in the above table.

# **3 TRANSPARENCY**

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

#### 3.1 INTERNALLY:

Form of communication	Stakeholders	Person responsible	Frequency
Project execution plan	Project team  All on-site employees.	Project manager / site manager	At the first start of the project works
Internal communication to all white-collar workers on targets, carbon footprint and progress	White-collar workers	Project manager / site manager	Half-yearly
Toolbox meeting with blue-collar workers on targets, carbon footprint and progress	Blue-collar workers and subcontractors	Project manager / site manager	Yearly
Project introduction	All employees and subcontractors	Project manager / site manager	At the first start of the project works

# **3.2 EXTERNALLY:**

Form of communication	Stakeholders	Person responsible	Frequency
Project reporting per year by submitting an update of this project file to the client	Client	Project Manager	Yearly



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Publication of this project report on the website of the	Interested stakeholders	Energy & Emissions QHSSE Advisor	Half-yearly
partners involved.			

For operational questions, please contact the project management / site management For questions regarding carbon footprinting, please contact <a href="mailto:ghg.qhsse@jandenul.com">ghg.qhsse@jandenul.com</a>.