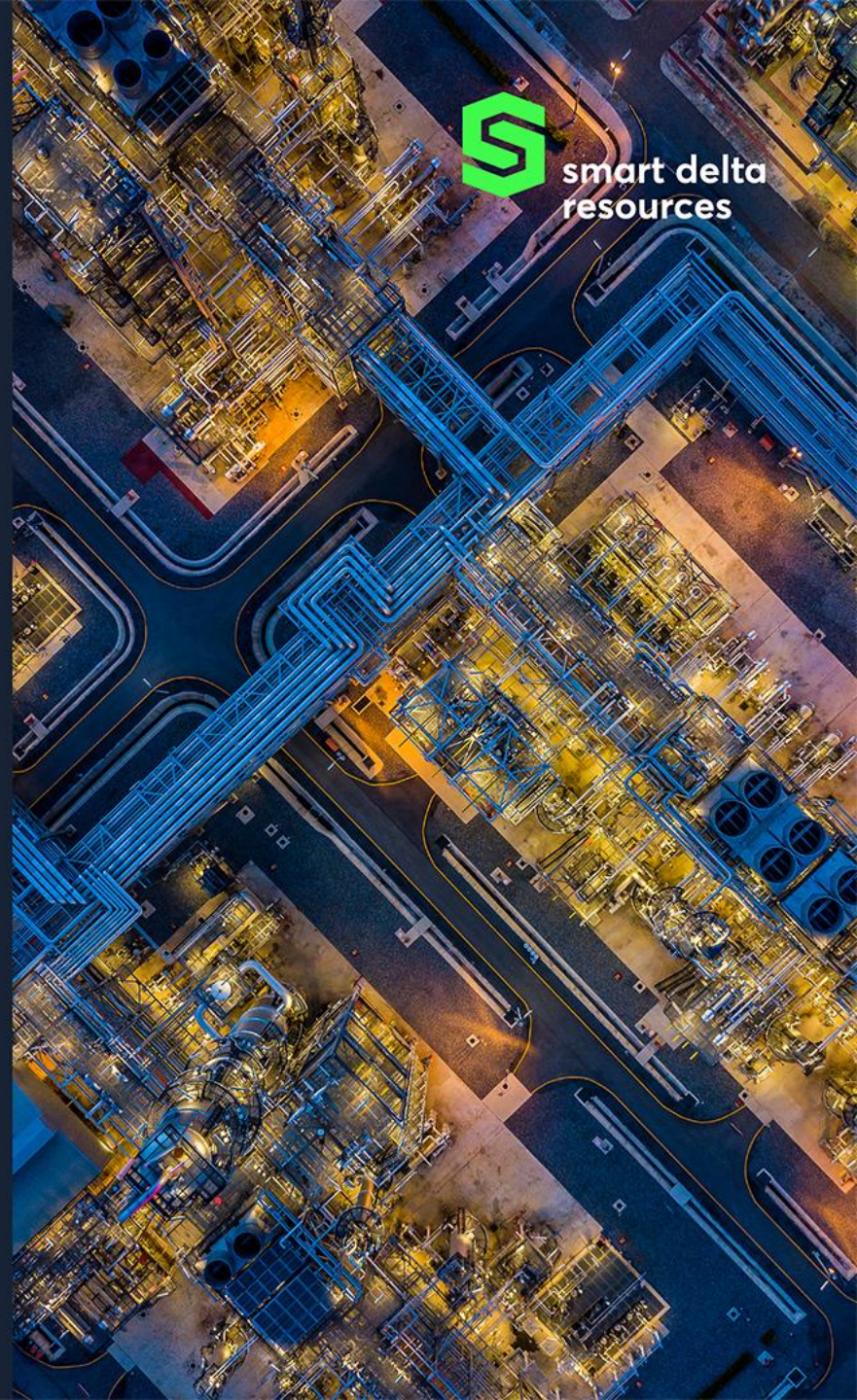
Smart Delta Resources Flanders

Cross border regional triple helix coördinaten for demo & implementation projects

_Together for a future proof industry



Smart Delta Resources - A unique private-public collaboration in de Scheldt-Delta region

smart delta resources

Crossborder samenwerking
Tussen Nederland en België

Innovatief cluster
Chemie - Staal - Energie - Food

North Sea Port
Nr. 3 haven van Europa

Werkgelegenheid
100.000 banen

Duurzame Energie Hub
Grootschalige aanlanding Wind op Zee en CO_2-vrije baseload

Waterstof
Grootste waterstofregio van de Benelux

CO_2-reductie impact
Vermindering van 22 Mton

SDR NL wordt gefaciliteerd door:

Provincie Zeeland · Impuls Zeeland · North Sea Port

SDR Flanders wordt gefaciliteerd door:

provincie Oost-Vlaanderen · POM Oost-Vlaanderen · gent:

Smart Delta Resources Organigram 2026

Frederik Van De Velde
CEO ArcelorMittal Belgium
Chairman SDR Flanders

Cas König
CEO North Sea Port
Vice Chairman SDR

Tabita Verburg
President Dow Benelux
Chairman SDR Nederland

Bob Van Schoor
Director SDR Flanders

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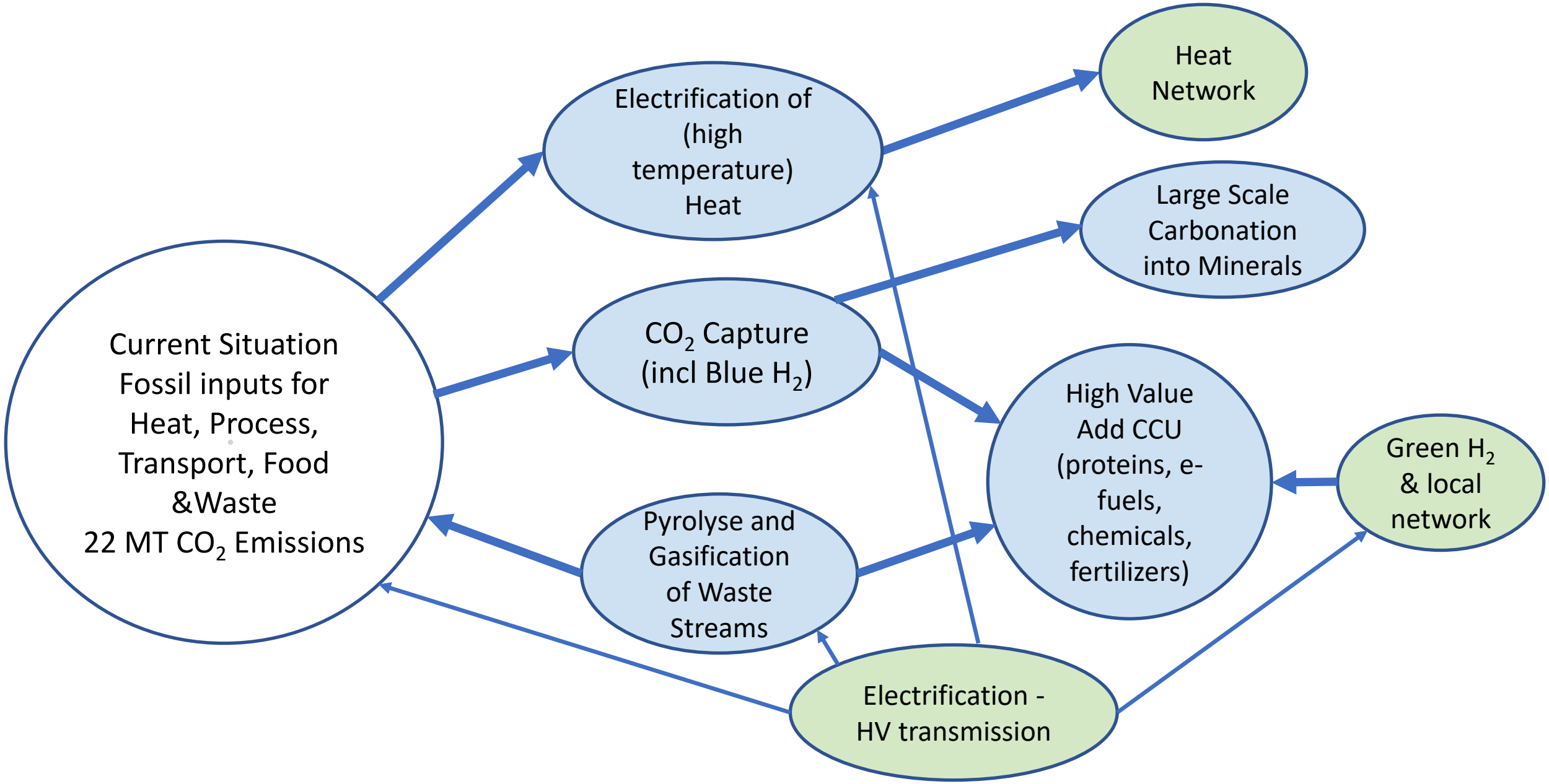
Program Mgr. Spark & Carbon Connect Delta

Onno Sinke
Communication & Board Secretary

Zaïda Floren
Public Affairs

Nicole de Hommel
Office Assistant

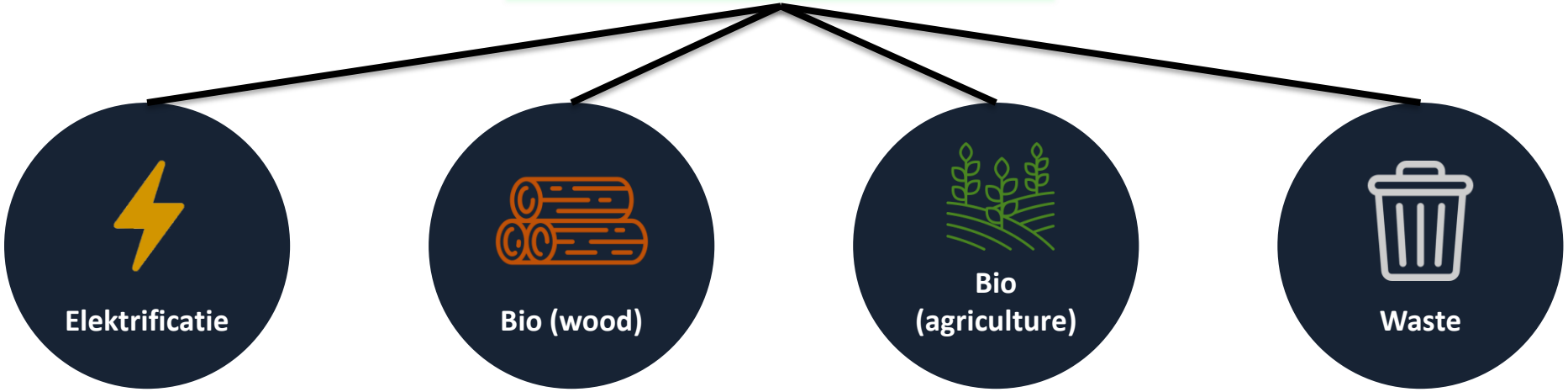
Smart Delta Resources – Concept map for the region – main-lines



SMART DELTA RESOURCES – a challenge of 22 MTon CO_2

All **transition trajectories** and **technologies** are need to be tackle the challenge!

Input SDR today:
19 Mton Carbon (95% fossil)
5 TWh elektricity



500% wind and solar BE+NL
300 TWh

120% wood waste EU27
63 Mton wood

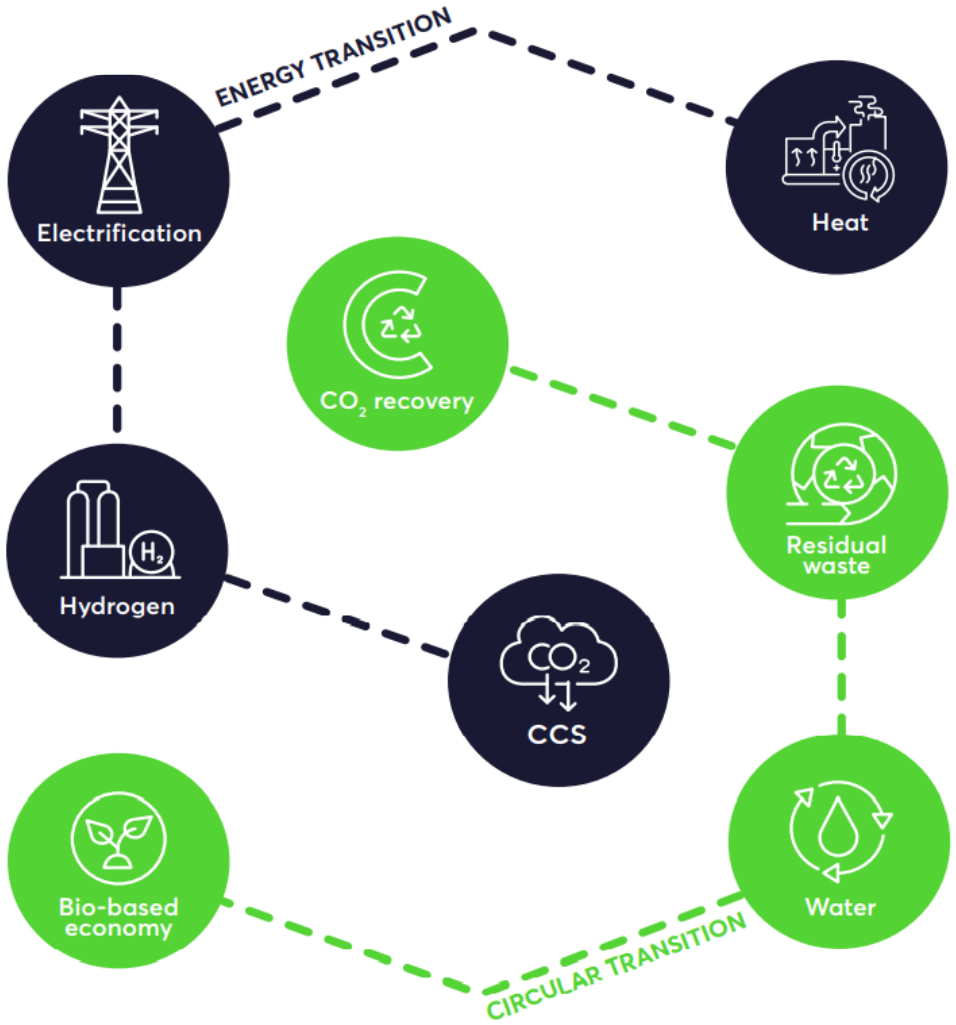
300% agricultural land BE+NL
25 Mton Ethanol

250% waste BE+NL WtE and landfill
35 Mton organic waste

Many sustainable sources are needed for a succesfull transition.

A common vision **avoids unhealthy competition**

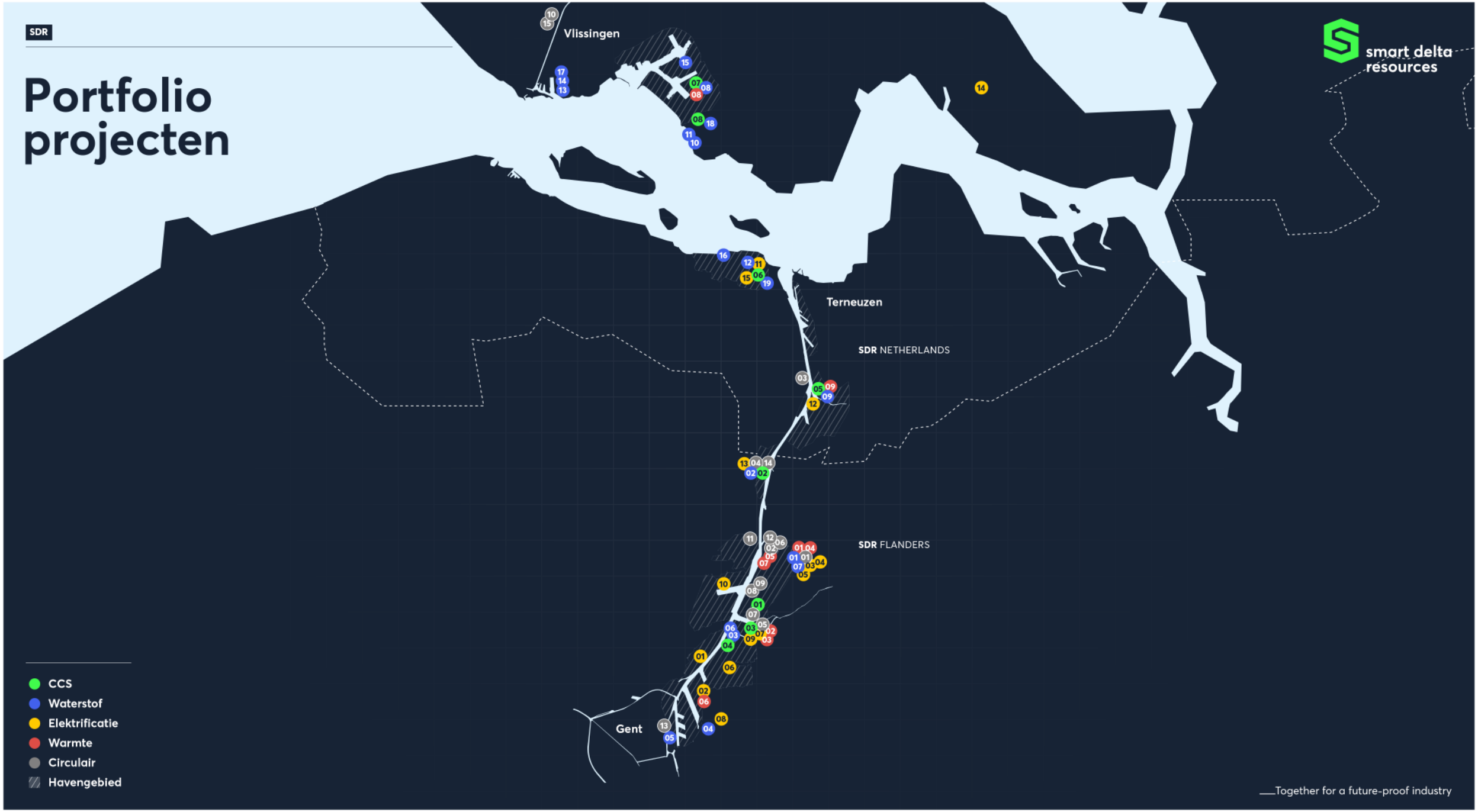
Project driven approach



SDR is a **project-driven platform** with various think tanks and focus groups. We centre our activities around two pillars: use of **renewable energy** and **circular processes**. These two pillars consist of **eight transition paths** in total to enable us to achieve our climate targets and to realise Europe's Green Deal. After thorough analysis each project is developed by a consortium of different SDR member companies.

SDR

Portfolio projecten



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Portfolio projecten

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CCS

Nr.	Project	Betrokken leden	Status
01.	**Blast Furnace**	ArcelorMittal ENGIE	**Active - Pilot**
02.	**CO_2 backbone Vlaanderen**	fluxys	**Under construction**
03.	**Gent Carbon Hub**	fluxys ArcelorMittal	**On hold**
04.	**H2BE**	ENGIE +	**Granted/ in progress**
05.	**CCS project**	YARA +	**Under construction**
06.	**Path-2-Zero**	Dow	**On hold**
07.	**Azur**	Zeeland Refinery	**Study**
08.	**Delta Schelde Co2nnection**	Gasunie	**Study**

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Portfolio projecten

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Waterstof

Nr.	Project	Betrokken leden	Status
01.	Direct Reduced Iron Plant	ArcelorMittal	On hold
02.	H_2 backbone PoAB-NSP	fluxys	Construction fase 1 started
03.	H2BE	ENGIE	Granted/ in progress
04.	H_2 /Battery Electric Vehicle tankstation	VOLVO, AIR PRODUCTS +	Construction started
05.	Multifuel motor	ANGLO BELGIAN CORPORATION	Active
06.	North-C-Hydrogen	ENGIE	On hold
07.	Global Energy Transition (GET) Lab	finocas	Active
08.	EnergHys	Air Liquide TotalEnergies	In preparation (pre-FID)
09.	VoltH2 Terneuzen	VOLTH2	In preparation (pre-FID)
10.	VoltH2 Vlissingen	VOLTH2	In preparation (pre-FID)
11.	SeaH2Land	Ørsted	Study
12.	Air Liquide Terneuzen	Air Liquide	Study
13.	Green Point Valley	VESTA	In preparation (pre-FID)
14.	Green Energy Hub	LBC	In preparation (pre-FID)
15.	Vopak importhub	Vopak	Study
16.	Evos importhub	EVOS	Study
17.	Ammonia cracker	AIR PRODUCTS	In preparation (pre-FID)
18.	Waterstofnetwerk Zuidwest-Nederland	Gasunie	In preparation (pre-FID)
19.	Waterstofuitkoppeling	DOW YARA	Active

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Portfolio projecten

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Elektrificatie

Nr.	Project	Betrokken leden	Status
01.	Proces elektrificatie	KRONOS	In preparation
02.	Elektrische ovens	VOLVO Car Ghent	In preparation
03.	Afval-energie centrale	bee	In preparation
04.	Bio-energie centrale	bee	Active
05.	Electric Arc Furnace	ArcelorMittal	
06.	Elektrificatie terminal	DFDS	Active
07.	E-boiler stoomproductie	alcobiofuel	
08.	H2/Battery Electric Vehicle tankstation	VOLVO Group Belgium (Volvo Trucks) AIR PRODUCTS +	Construction started
09.	Baekeland	elia group	Construction started
10.	Kluizendok	elia group	Construction started
11.	Proces elektrificatie	DOW	In preparation
12.	Proces elektrificatie	YARA	In preparation
13.	Proces elektrificatie	Cargill	In preparation
14.	Proces elektrificatie	LambWeston	In preparation
15.	E-cracking	DOW	Study

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Portfolio projecten

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Warmte

Nr.	Project	Betrokken leden	Status
01.	**Bio-energie centrale**	bee	On hold
02.	**Stoomleiding**	bee alcobiofuel	Construction fase 1 started
03.	**20 MW e-boiler**	alcobiofuel	Granted/ in progress
04.	**CCS Blast Furnace/ Direct Reduced Iron**	ArcelorMittal	Construction started
05.	**Foster Gent**	ArcelorMittal	Active
06.	**Warmtenet**	stora enso VOLVO	On hold
07.	**Warmtenet Zelzate/ Sint-Jan Baptist**	ArcelorMittal	Active
08.	**Sloewarmte**	Evides	In preparation (pre-FID)
09.	**WarmCO_2**	YARA	In preparation (pre-FID)

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Portfolio projecten

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Circulair

Nr.	Project	Betrokken leden	Status
01.	Afval-energie centrale	bee	On hold
02.	Foster Gent	ArcelorMittal	Construction fase 1 started
03.	North-C-Circular	ArcelorMittal	Granted/ in progress
04.	Enough	Cargill	Construction started
05.	Steelanol	ArcelorMittal	Active
06.	Torero	ArcelorMittal	On hold
07.	Induss II proceswater	alcobiofuel	Active
08.	Green CO_2	alcobiofuel	In preparation (pre-FID)
09.	Cargill - Waste Based Biodiesel Plant	Cargill	In preparation (pre-FID)
10.	Deminwater- en zuiveringsstraat	Evides	In preparation (pre-FID)
11.	Envisan / Jan de Nul	Jan De Nul GROUP	Study
12.	ArcelorMittal	ArcelorMittal	Study
13.	Stora Enso	storaenso	In preparation (pre-FID)
14.	Rain Carbon	RAIN RAIN CARBON INC.	In preparation (pre-FID)
15.	Evides	Evides	Study

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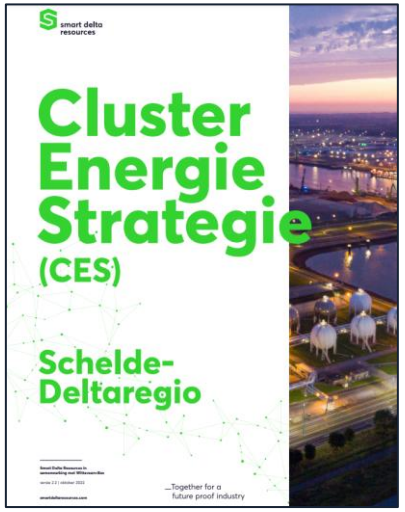
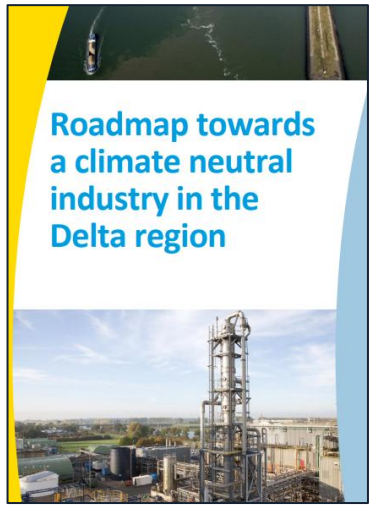
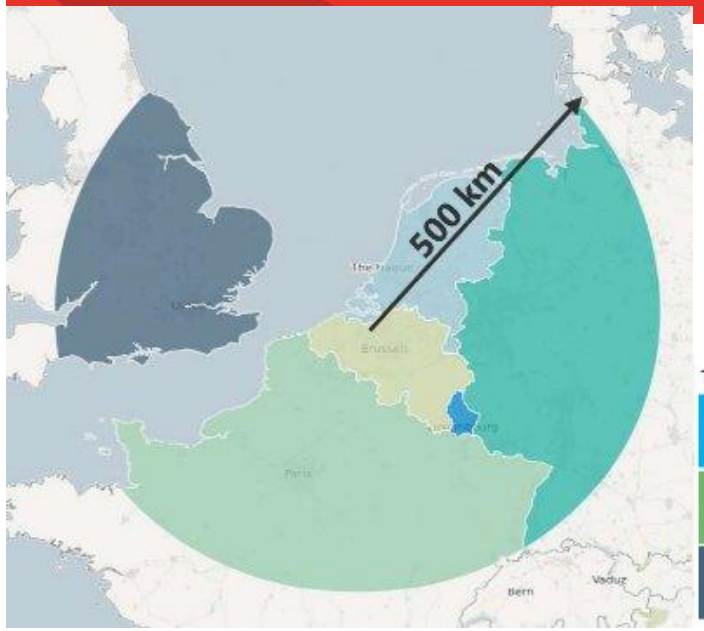
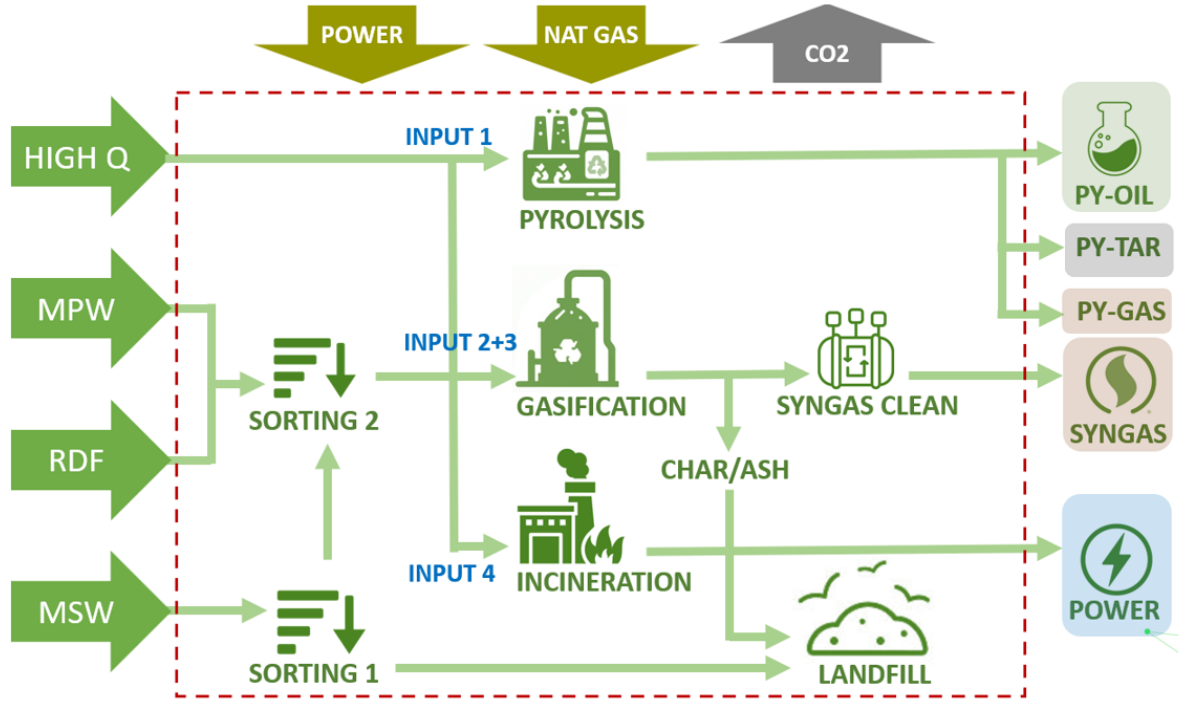
STUDIES & REPORTS





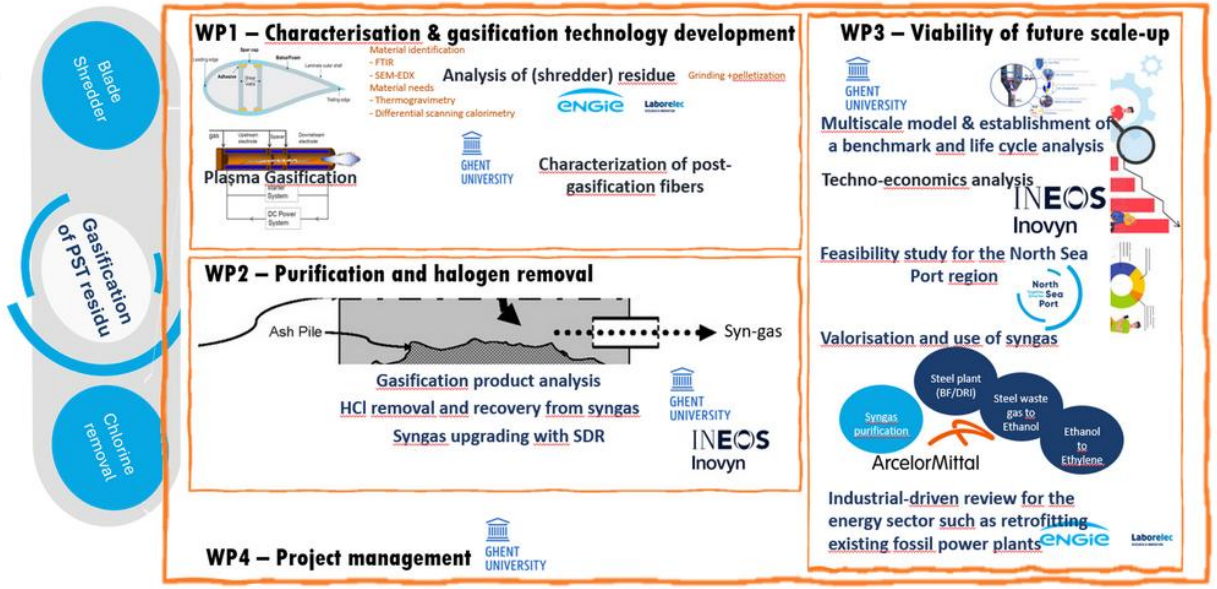
Project CIRCULAR-C



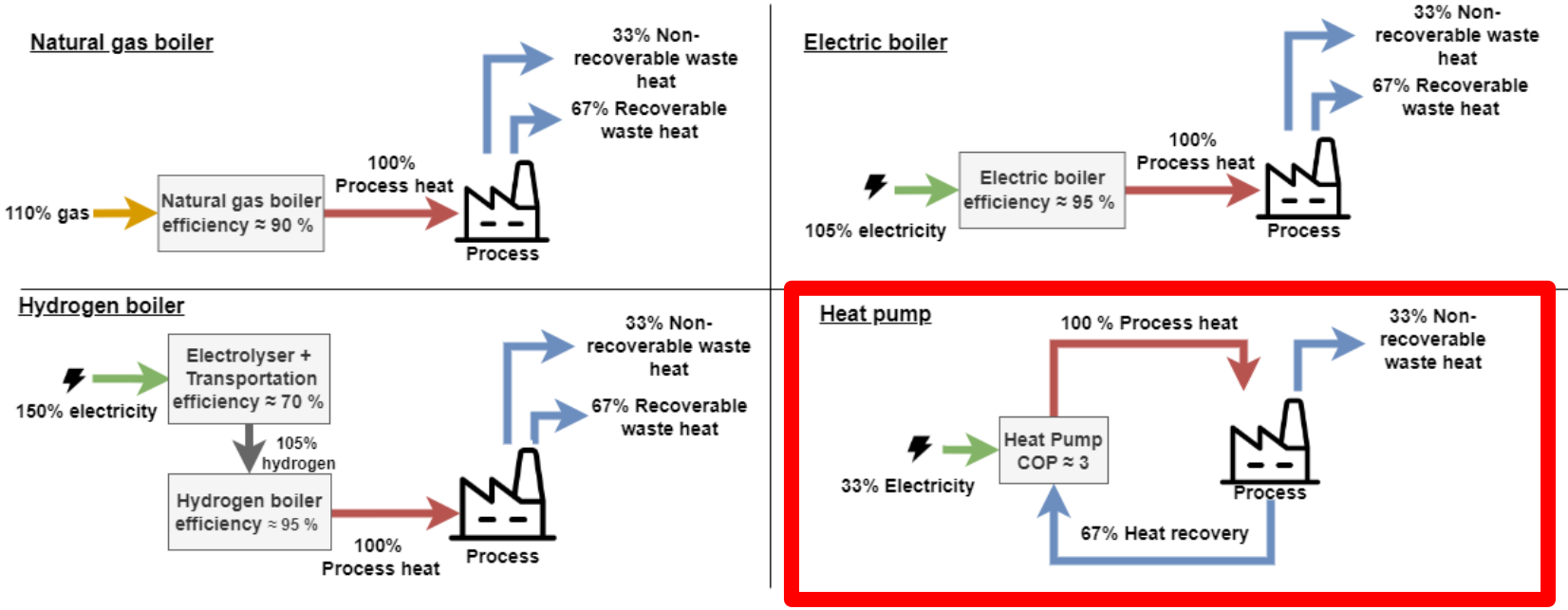


Totaal in scopegebied:

56 Mton verbrand[2]	**65 Mton** verbrand
9 Mton biomassa[3]	
120 Mton gestort[2]	**120 Mton** gestort



Project B2B HEAT



Contents lists available at ScienceDirect

Applied Thermal Engineering

journal homepage: www.elsevier.com/locate/apthermeng

Research Paper

High-temperature heat pumps in industrial heating networks: A study on energy use, emissions, and economics

Elias Vieren [a,*], Kenny Couvreur [a], Michel De Paepe [a,b,c], Steven Lecompte [a,b]

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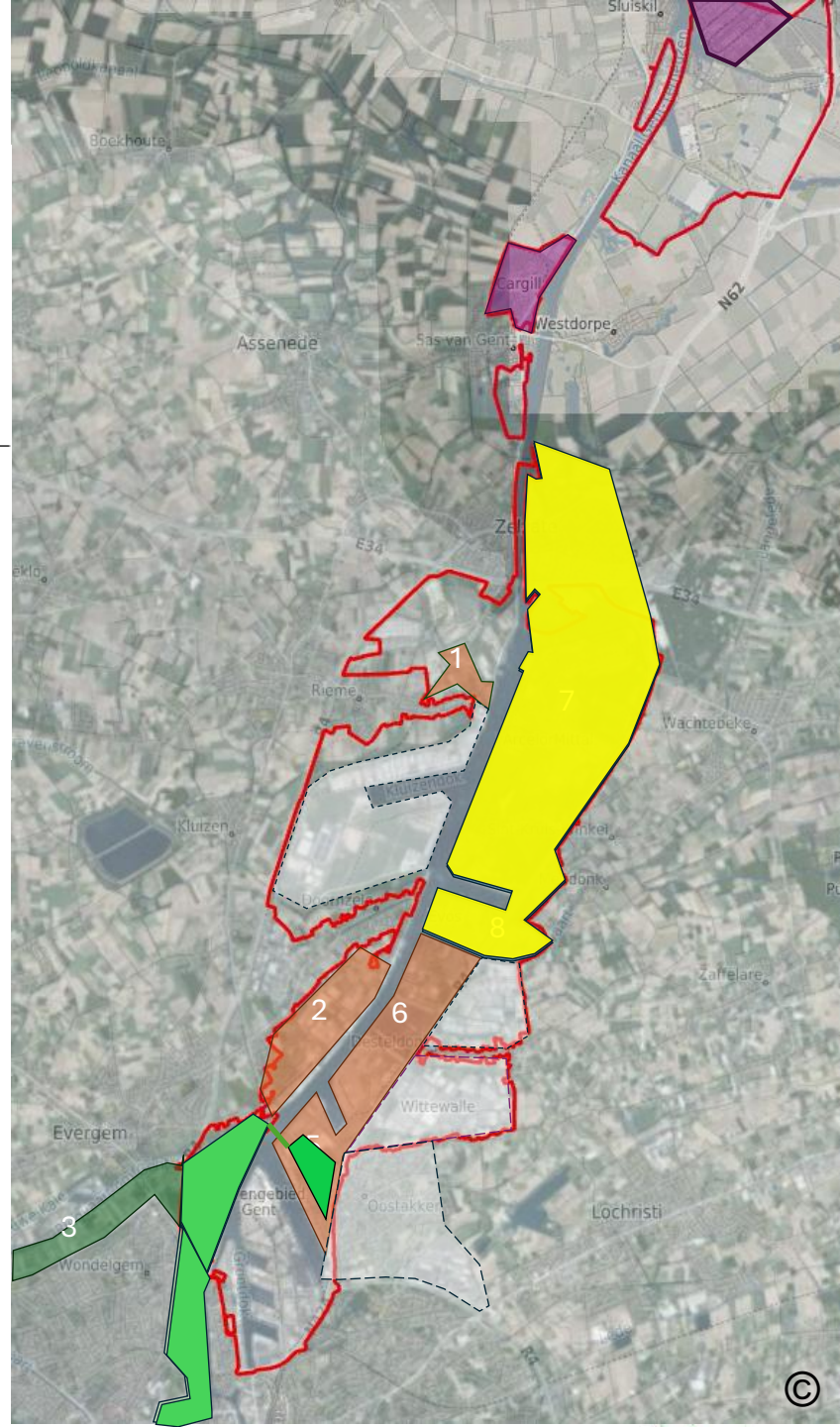


Project MAP-IT CCU

emis Vlaanderen is milieubewust

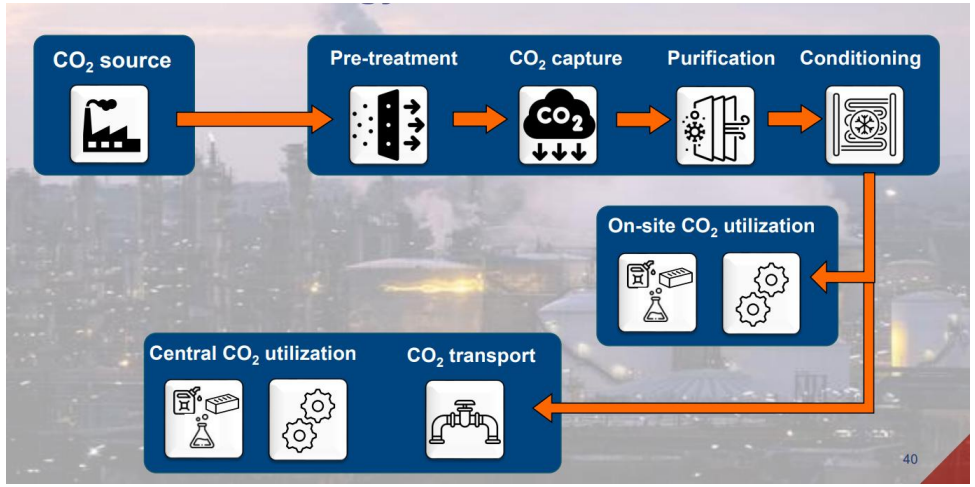
Home » Tools » mapitccu

About Map-it CCU

Technologies

Documents

Tool



What is the CO2 concentration in your feed gas? *

- Low (<10%)
- Medium (10-30%)
- High (>30%)

What is the scale of CO2 capture? *

- Small (<100 kt)
- Medium (100-1000 kt)
- Large (>1000 kt)

What is your preferred energy source? *

- Electricity
- Heat

What is the pressure of the feed gas and would like to invest/add a feed gas compressor? *

- Low (<=1.2 bar) with compressor
- Low (<=1.2 bar) without compressor
- High (>1.2 bar) with compressor
- High (>1.2 bar) without compressor

What is the temperature of the feed gas and would like to invest/add a feed gas cooler? *

- Low (<=40 °C) with cooler
- Low (<=40 °C) without cooler
- High (>40 °C) with cooler
- High (>40 °C) without cooler

Is waste heat available? *

- Yes
- No

CAPTURE Academy

ALL COURSES CO2 INCITE PLASTICS WATER

ALL COURSES, WATER, CO2

CCU Technology tool

50 Lessons | **Free**

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