



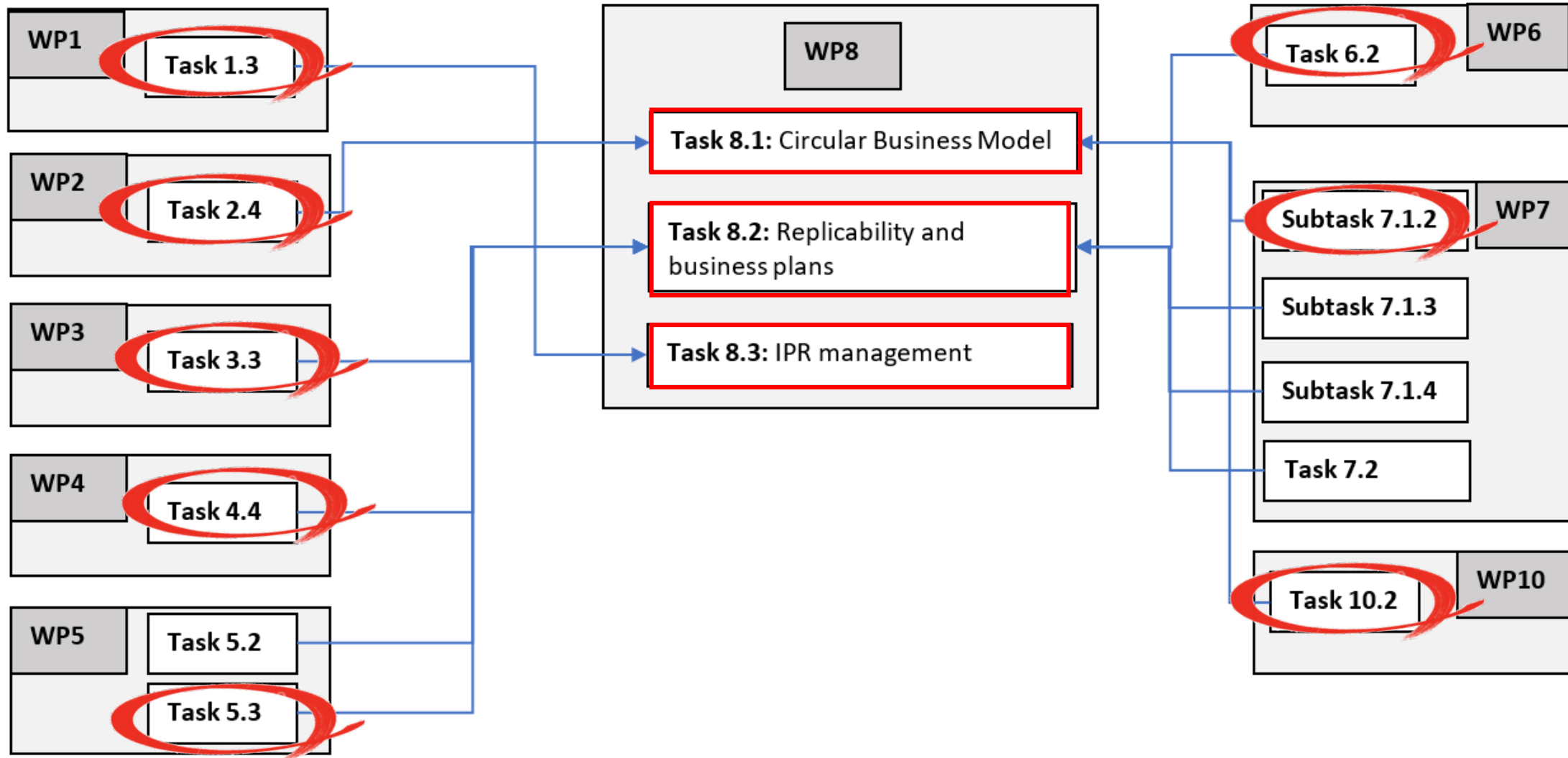
ZERO BRINE

Dimitris Xevgenos
WP8 Leader

WP8: Tasks

- **Task 8.1:** Circular business model, economic mechanisms and governance related to the large scale demonstration activity of the project (Leader: TUDELFT)
- **Task 8.2:** Replicability of case studies across EU – Business Plan by sector (Leader: SEALEAU)
- **Task 8.3:** Intellectual Property Rights Management (Leader: TUDELFT)

WP8: Interlinkages with other WPs/tasks



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IMPLEMENTATION PLAN for the Botlek pilot

Created by Brian Baldassarre



WHAT IS THE IDEA?

What do you offer?

Who will use it / buy it?

Why will they use it / buy it?

WHAT IS THE IMPACT?

How do you measure environmental impact?

How do you measure social impact?

HOW DOES IT WORK?

Step 1

Time

HOW DO WE MAKE IT HAPPEN?

Who is involved?

What does he do?

What does he get out of it?

What can go wrong?

Under development (IDE)...

Brian will present this later today

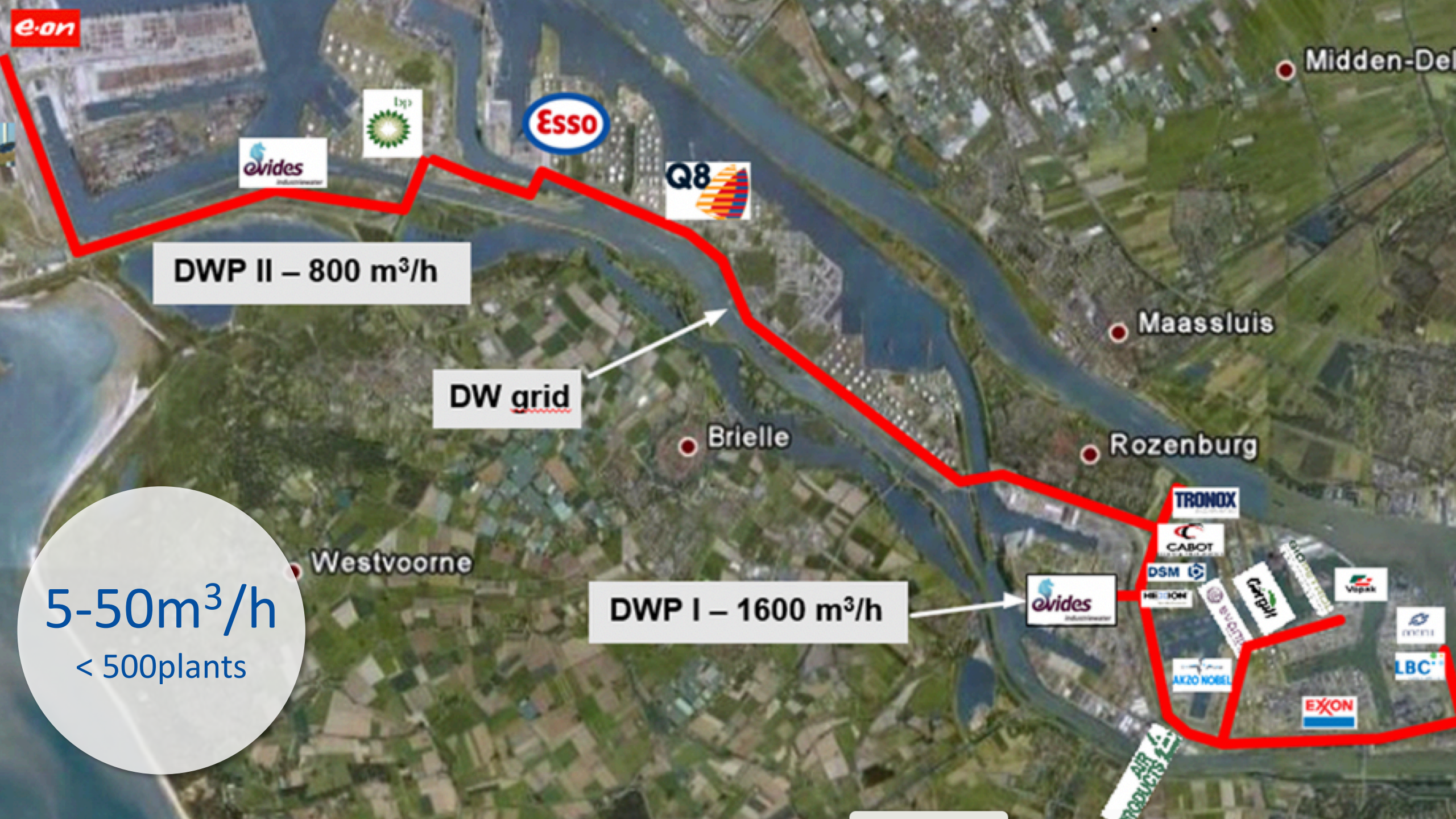
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Task 8.2.1: Business Plans (Lead: SEALEAU)



DWP II – 800 m³/h

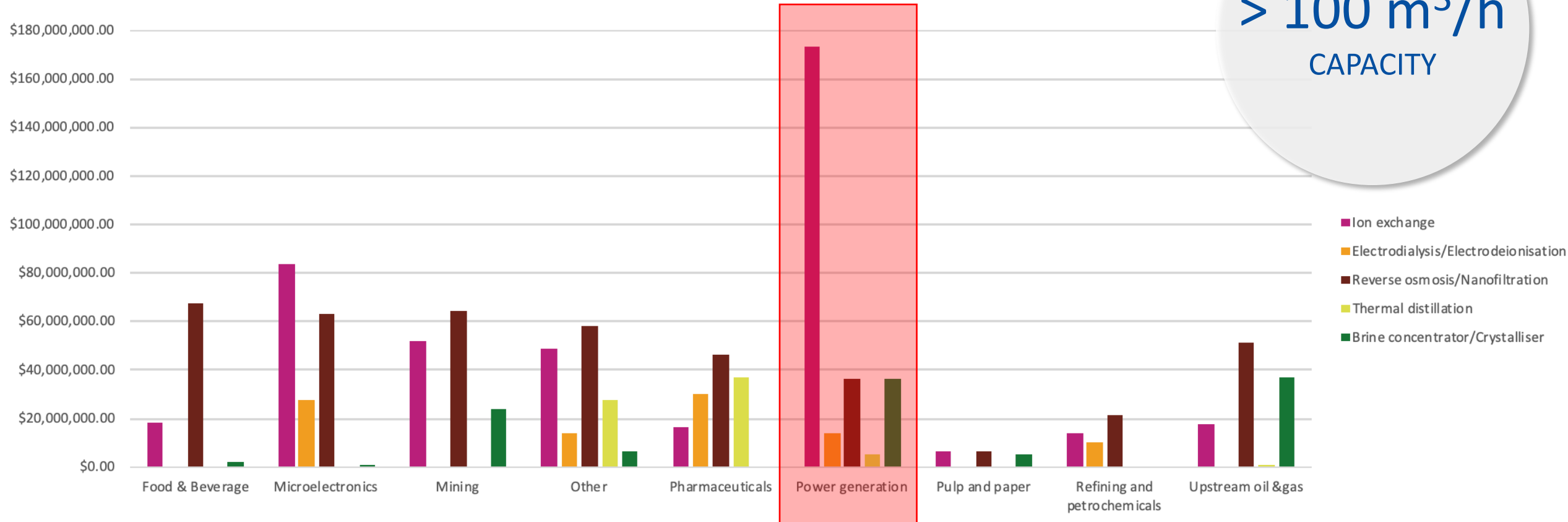
DW grid

DWP I – 1600 m³/h

5-50m³/h
< 500plants

Case: “Ion Exchange” Brines

> 100 m³/h
CAPACITY



Case: Silicon dioxide (Silica gel)



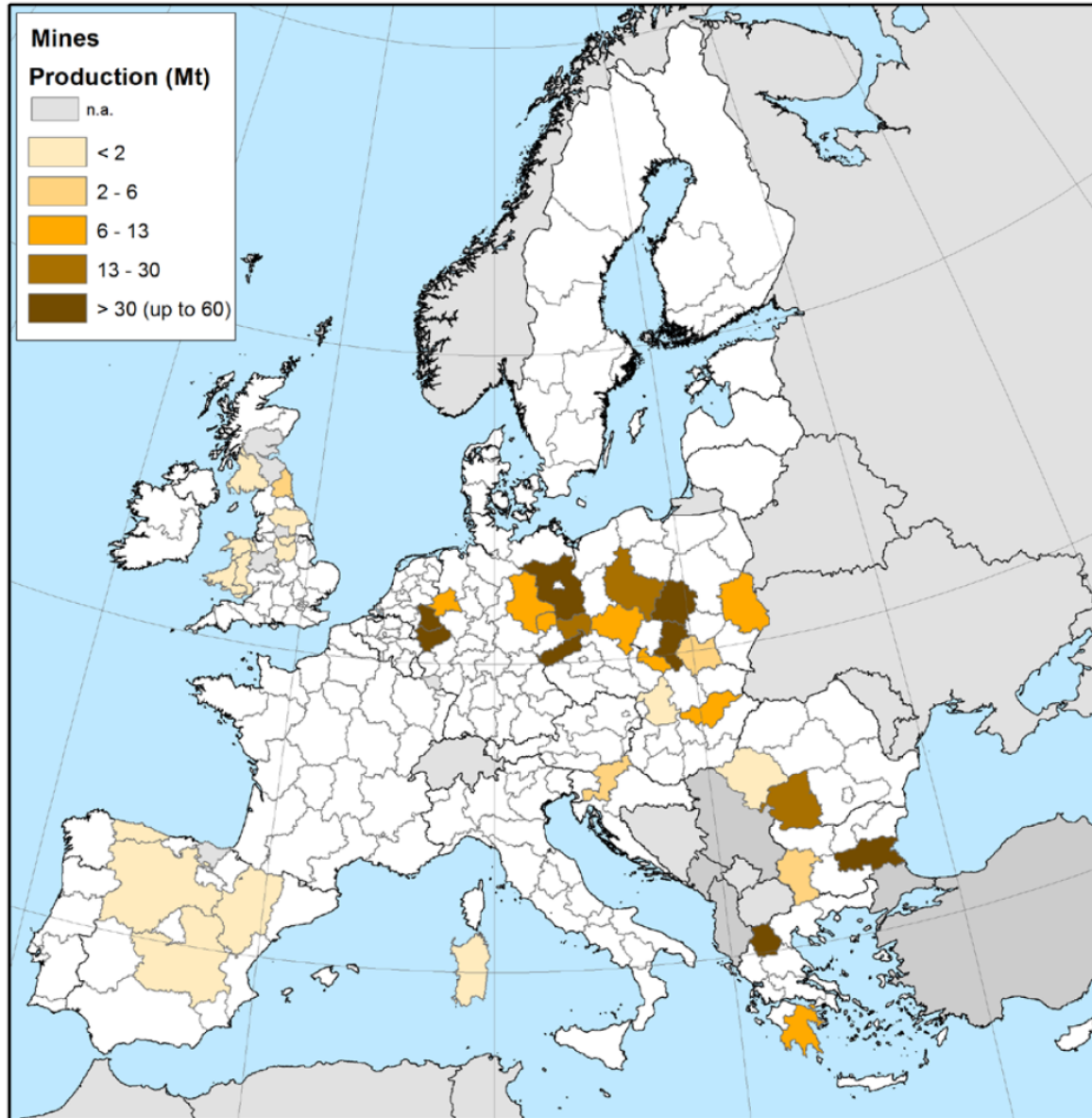
- Evonik Industries AG (Germany)
- Gujarat Multi Gas Base Chemicals Pvt. Ltd. (China)
- Industrias Químicas del Ebro, S.A. (IQE Group) (Spain)
- Madhu Silica Pvt. Ltd. (India)
- Oriental Silicas Corporation (Taiwan)
- PPG Industries, Inc. (United States)
- PQ Corporation (United States)
- Quechen Silicon Chemical Co., Ltd. (China)
- Solvay S.A. (Belgium)
- Tosoh Silica Corporation (Japan)
- W.R. Grace & Co. (United States)



5 plants
Appl: tires



Case “Coal mines”



128

Coal Mines

72%

HARD COAL
PRODUCTION:
POLAND

No	Coal mine	Coal mine company
1	KWK Borynia-Zofiówka-Jastrzębie	Jastrzębska Spółka Węglowa JSW Group (4)
2	KWK Budryk	
3	KWK Knurów-Szczygłowice	
4	KWK Pniówek	
5	KWK ROW	Polska Grupa Górnicza PGG (8)
6	KWK Ruda	
7	KWK Piast-Ziemowit	
8	KWK Sośnica	
9	KWK Bolesław Śmiały	
10	KWK Wujek	
11	KWK Mysłowice-Wesoła	
12	KWK Murcki-Staszic	
13	ZG Nowe Brzeszcze	Tauron Wydobycie (3)
14	ZG Janina	
15	ZG Sobieski	
16	KWK Silesia	Przedsiębiorstwo Górnicze Silesia
17	KWK Bobrek-Piekary	Węglokoks
18	KWK Bogdanka	Lubelski Węgiel Bogdanka S.A.
*	Small private mines	

€7M

NEW PROJECT

Task 8.2.2: Framework agreement (Leader: SEALEAU)

- WABAG,
- TITANSALT,
- SOFINTER,
- KVT,
- Salt Partners,
- TECHNOFORM
- RHDHV
- EVATHERM
- MAGNA IMPERIO

Task 8.2.3: Replication case studies (Lead: NTUA)

Emissieregistratie: Chloride releases



277
FACILITIES

870
KT CHLORIDES/YEAR

Task 8.2.3: Replication case studies (Leader: NTUA)

- **The Netherlands:** HEXION & NOURYON, Lyondell/Chaincraft/SABIC,
- **Greece / Cyprus:** EAC, HELPE
- **Poland:** Debiensko / PGWiR
- **India:** VSI (sugar industry)
- **Malta:** Water Services Corporation / Energy& Water Agency
- **Italy:** SMEDE

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WP8: Deliverables/Milestones

- **Milestones (Due date)**

- MS18 – M35 (**April 2020**): Framework Agreement between technology suppliers SEALEAU

- **Deliverables – Due Date**

Description

Lead Beneficiary

- D8.1 – M35 (**April 2020**): Framework agreement between technology suppliers SEALEAU
- D8.2 – M48 (**May 2021**): **Circular economy business model in Rotterdam Port** TU DELFT
- D8.3 – M48 (**May 2021**): MoU between relevant stakeholders in Botlek area SEALEAU
- D8.4 – M48 (**May 2021**): Roadmap for replicability SEALEAU
- D8.5 – M48 (**May 2021**): **Business plans for industrial sectors** SEALEAU
- D8.6 – M48 (**May 2021**): Business plans for participating SMEs SEALEAU