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Decarbonization in the pulp and paper industry: Shaping the future

Sappi at glance
Current decarbonization roadmap
Success stories
Looking ahead and shaping the next success stories
Challenges and opportunities
Call to action

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Sappi solutions At a glance

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Sappi is a leading global provider of everyday materials made from woodfibre-based renewable resources.

Pulp

Graphic papers

Packaging papers

Speciality papers

Biomaterials

Timber products

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Sappi group At a glance

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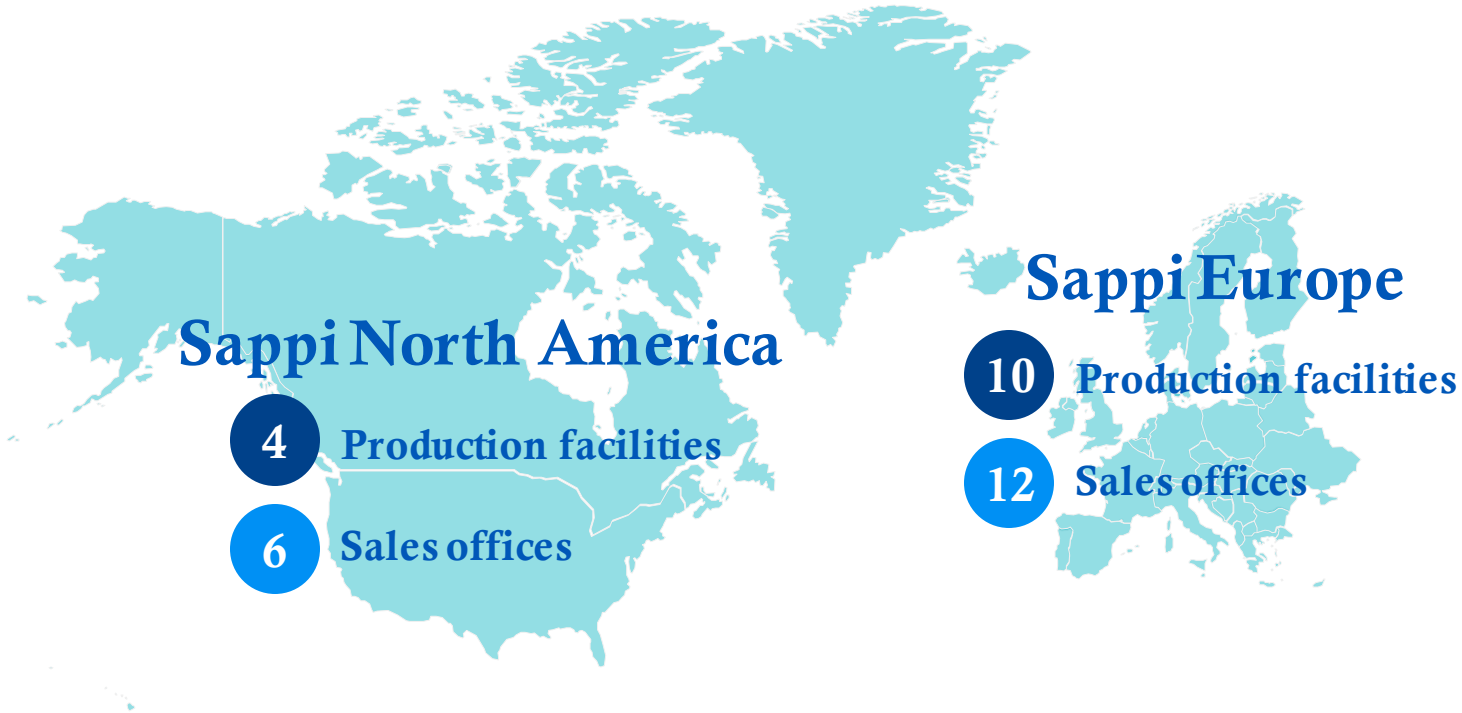

Sappi North America

4 Production facilities

6 Sales offices

Sappi Europe

10 Production facilities

12 Sales offices

Sappi Southern Africa

5 Production facilities

6 Sales offices

12,495

employees in 20 countries

customers in over

150 countries

Sappi Trading

8 **Sales offices**

Bogotá
Hong Kong
Johannesburg
México City
Nairobi
São Paulo
Shanghai
Sydney

** Statistics FY22.*

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Sappi Europe Decarbonization Roadmap

Our approved science-based emission reduction targets

Sappi Limited commits to reduce Scope 1 and 2 GHG emissions 41.5% per saleable production ton by 2030 from a 2019 base year.

Sappi Limited also commits that 44% of its suppliers (by spend) will have science-based targets by 2026 (ie, Scope 3).

Sappi Europe commits to reduce Scope 1 and 2 GHG emissions by 25% per saleable production ton by 2025 from a 2019 base year.

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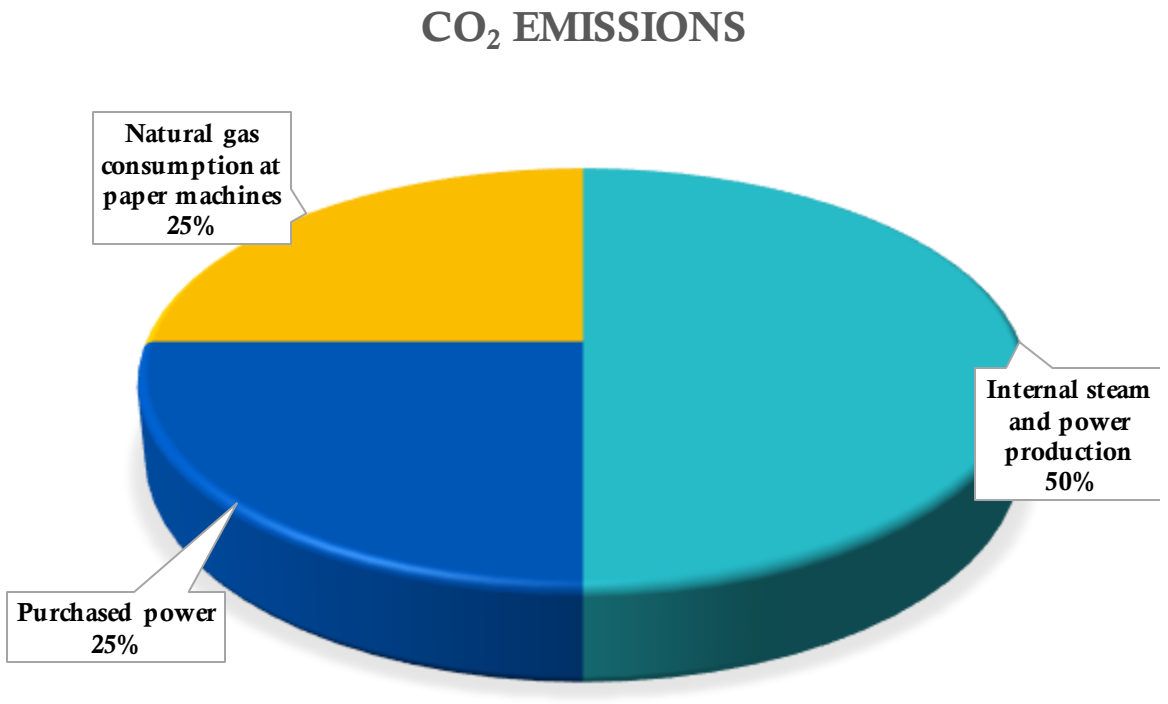
Defining the roadmap

1. **Listing all potential ways to decarbonize**
2. **Choosing ideas with the highest potential**
   - Emission reduction potential
   - Payback time: investment cost / annual saving potential

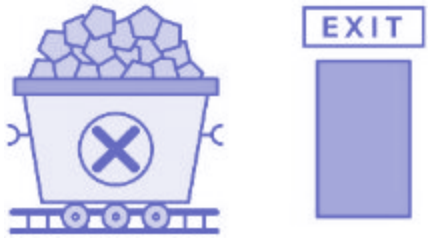


Source: Sappi Europe

Sappi Europe's decarbonisation roadmap for 2021-2025

1. Investing in ENERGY EFFICIENCY

Making our mills more eco-effective by improving energy efficiency and investing in state-of-the-art technology

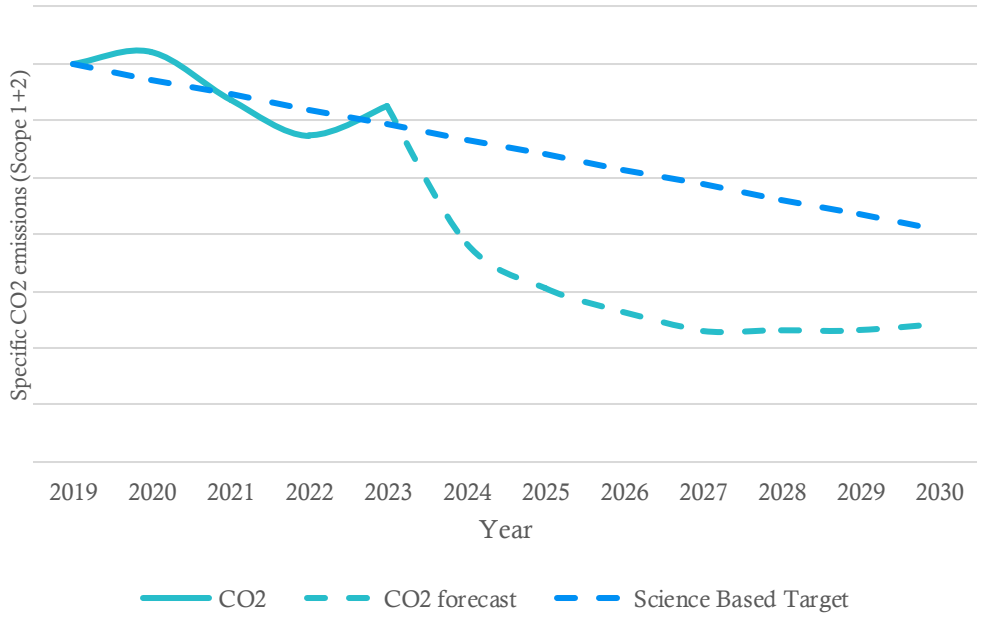


2. Shifting ENERGY SOURCES

Reducing our carbon footprint through increasing share of renewable energy

3. Green ELECTRICITY

Exploring electrification and increasingly procuring green electricity



Highlights of projects in our decarbonisation roadmap

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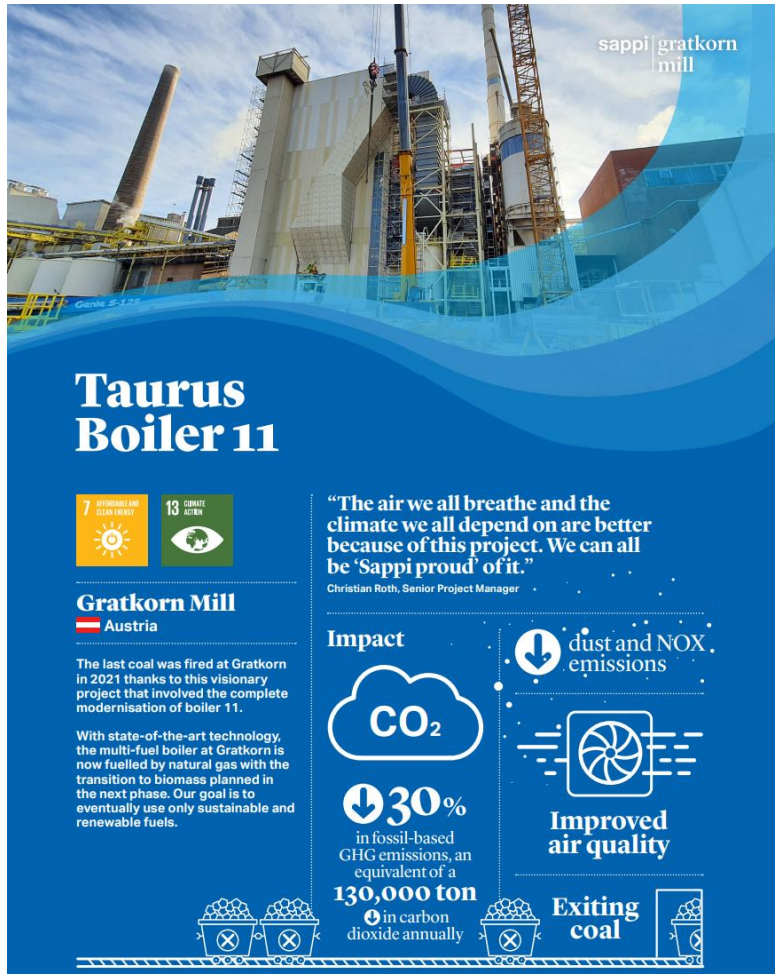

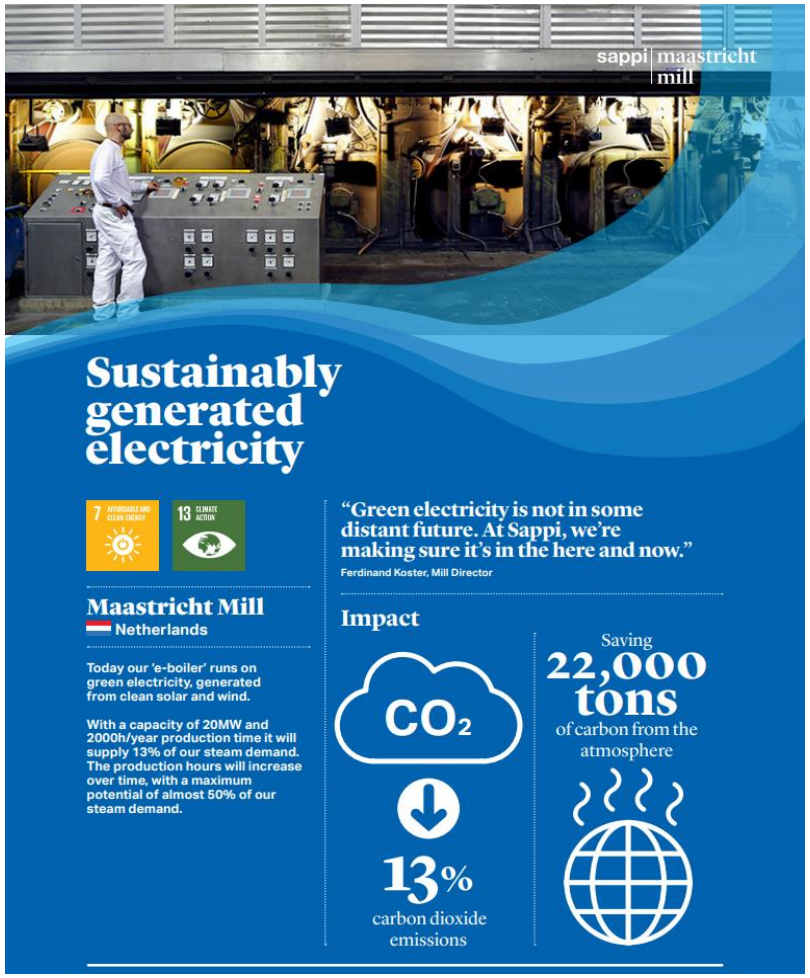

Looking ahead: Launching energy study to maximise on available options

- Sappi Alfeld and Ehingen mills in Germany, and Sappi Condino mill in Italy
- Decarbonizing steam and power production
- Replacing natural gas
- In operation latest by 2030

Pallette of fuels and technologies

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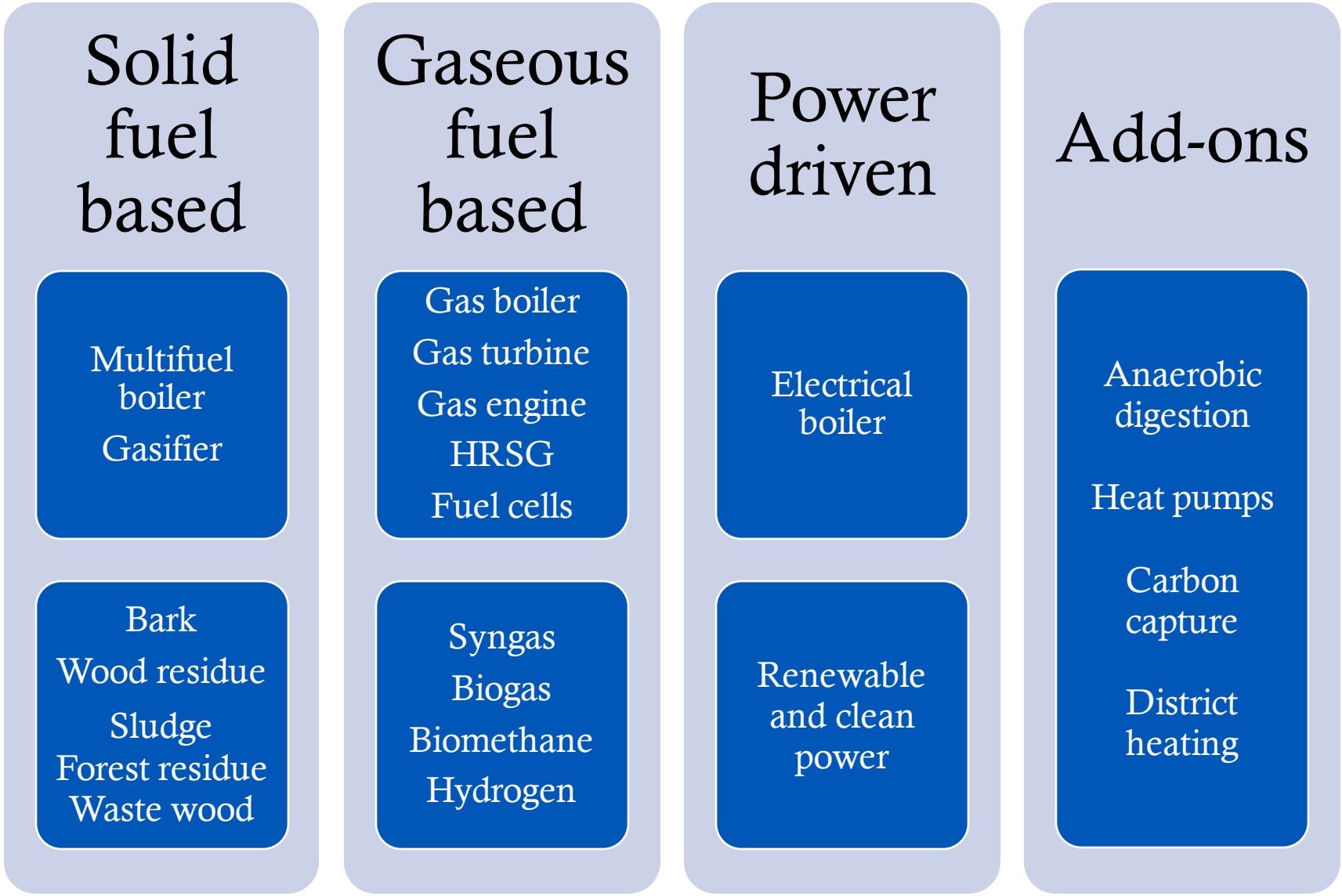

Supply of 20…200 tons of steam per hour and 5…60 MW power

Challenges in shaping the solutions

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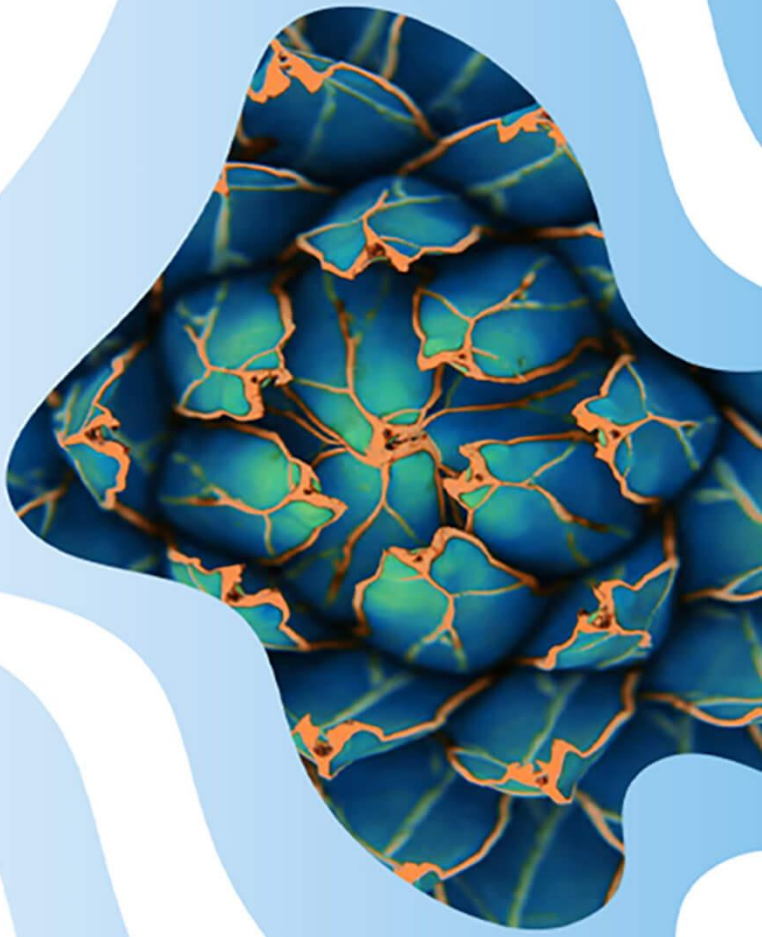
- Choosing dependencies
- Fit for the future business
- Reality check: hydrogen readiness
- Permitting
- Power grid capacity
- Public acceptance
- Funding



Enabling decarbonization

- Utilization of biomass and residues in energy production
- De-bottlenecking power grid
- Investments into renewable power
- Alternatives for NG, when using the NG infrastructure
- Promoting power to X technologies
- Fast permitting

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