

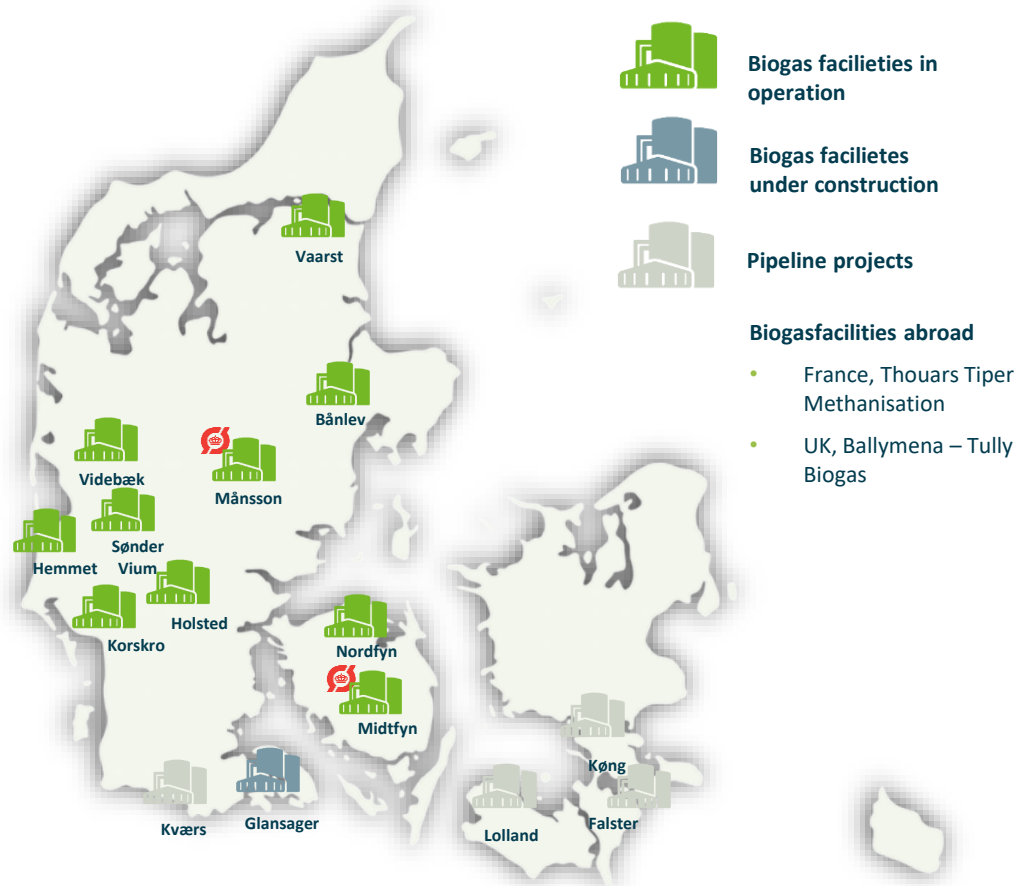


nature  
energy

# CURRENT CHALLENGES FOR TRADING BIOMETHANE CERTIFICATES

15.06.2021

# Today we operate 12 facilities



Nature Energy produces biomethane. The biomethane is produced from livestock manure, household waste and other wastestreams created by society.

The first biomethane facility was established in Holsted in 2015, and today Nature Energy is among the largest producer of biogas with 10 facilities on the island of Funen and in Jutland.

In 2021 Nature Energy converts almost 5 mio. tons of biomass into 170 m<sup>3</sup> of biogas





## Plant commissioning date

October 2018

## Biomass digestion

700.000 tonnes annually. 75 % manure and 25 % industrial waste / Maize  
<5% maize.

## Biogas production capacity

240 GWh/a of upgraded biomethane.

## Certification and guarantee of origin



## Upgrading plant

Amine scrubber - puregas

## Other Facts

Partially owned by livestock manure suppliers

Biomasses are stored in closed containers at all times

CO<sub>2</sub> is captured and used for various purposes (Breweries etc.



# High growth in global demand for biomethane towards 2040

THE NARROW PATH



## Global demand for biomethane will increase significantly, especially in Asia

Average growth in global demand is expected to be 20% per year.

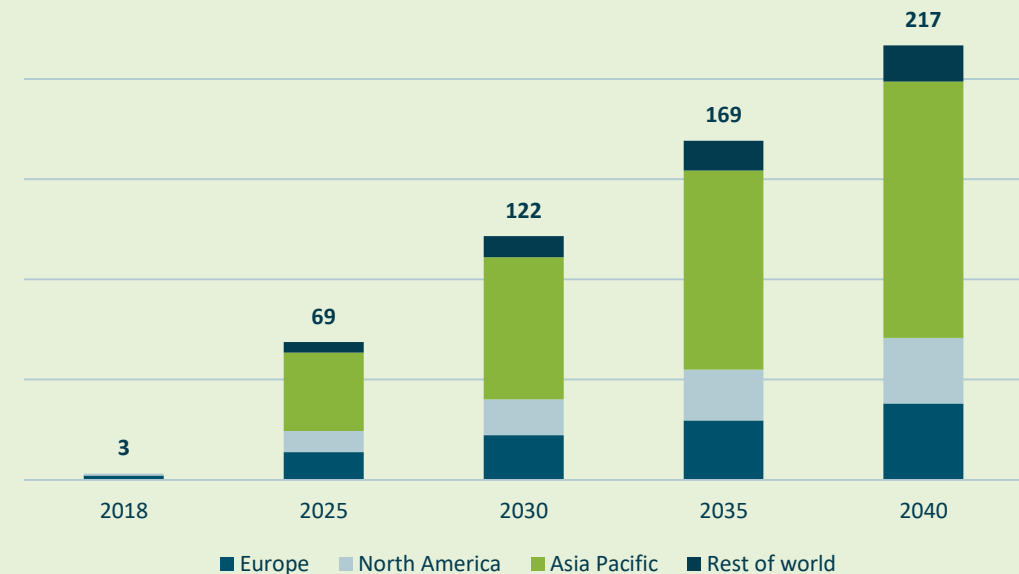
From 2025 60% of the global demand will come from Asia, while 30% will come from Europe and North America

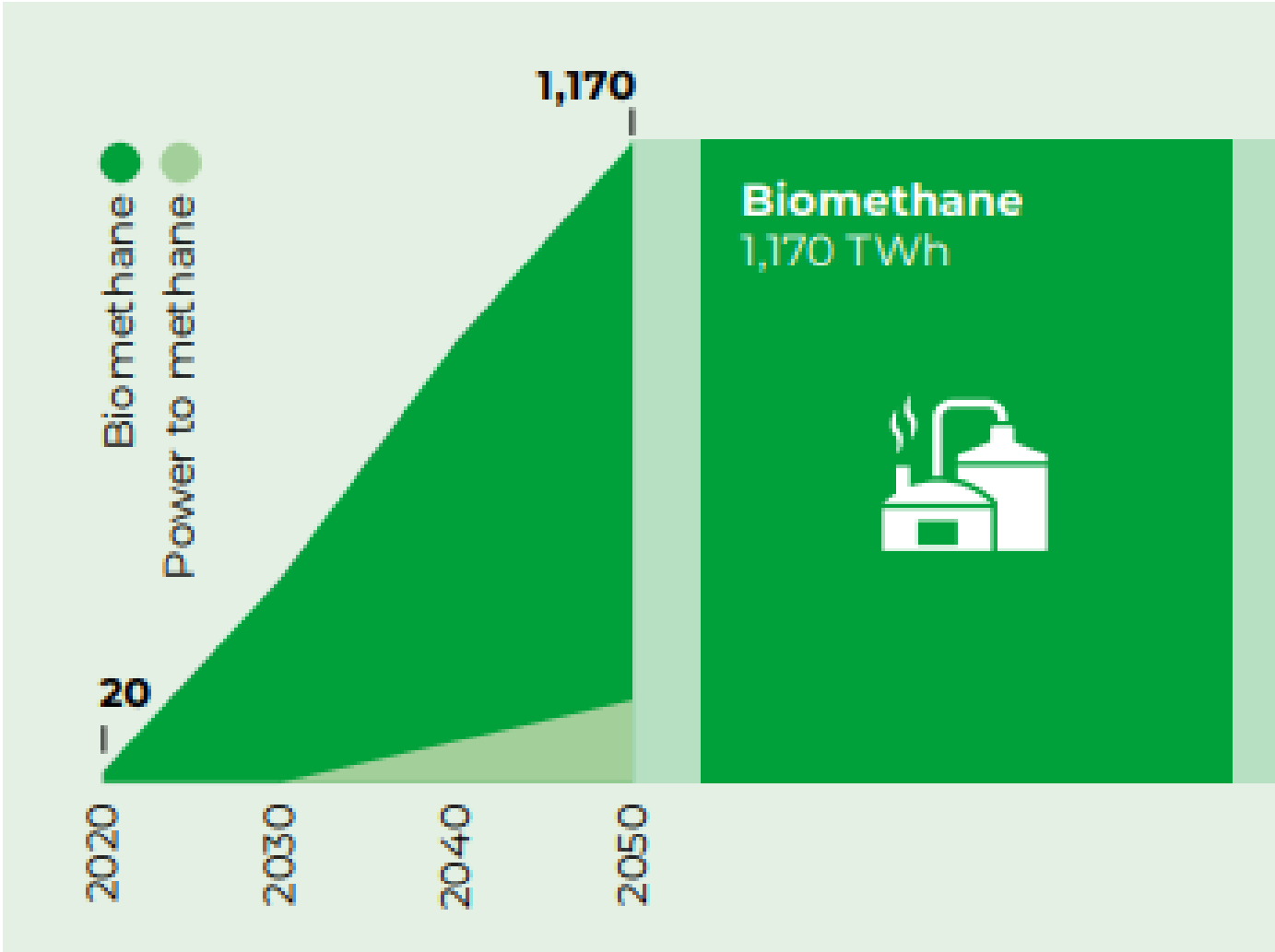


## Biomethane is competitive

According to IEA most of the potential for biomethane is competitive against other abatement alternatives, particularly when including reduced methane emissions (**< 200 €/ton CO<sub>2</sub>**)

Projections for biomethane demand across regions,  
BCM CH<sub>4</sub>





- Gas for Climate: potential for 1,170 TWh renewable methane in 2050. Recommends biomethane above green hydrogen as low cost option
- 370 TWh in 2030
- Societal value of having sustainable gasses in the energy mix compared to a minimum of gas is 217 billion pr. year

Sector	Cost savings (billion € per year)
Buildings	61
Industry	70
Transport	14
Power	54
Infrastructure	19
Total	217

# Challenges

- What is a certificate?
  - A Guarantee of Origin for voluntary commitment
  - A carbon tax relief instrument
  - A substitute for EU-ETS
  - A product declaration that the gas is a renewable fuel
- Who owns a certificate
  - The gas producer
  - The balancing responsible gas supplier
  - The subsidy payer
- What is the value of the certificate
  - Certificates are like gold
  - They have no real value except the value we collectively assign to them
- And who is going to buy it
  - Customers are many and varied
  - Ranging from individuals wanting to change the world to companies that view biomethane as a cost minimisation exercise
  - Can they be exported
  - Can they be imported
- Who becomes green when consuming a certificate
  - The country or the consumer
- All of these issues vary from one country to the next
- And the correct answer to these questions now may be very different in the future
- Validating value chains and buying interest is more important than ever
  - For determining feedstocks
  - For bankability of projects
  - Pursuing own sales vs using an intermediary

# Thank you for your attention

Jonas C. Svendsen  
Head of Trading  
Mobile: +45 40 34 18 52  
E-mail: [jcs@nature-energy.com](mailto:jcs@nature-energy.com)