

Biogas and biomethane development in Europe

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European Biogas Association

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5th COASTAL biogas conference



The European Biogas Association

Full members

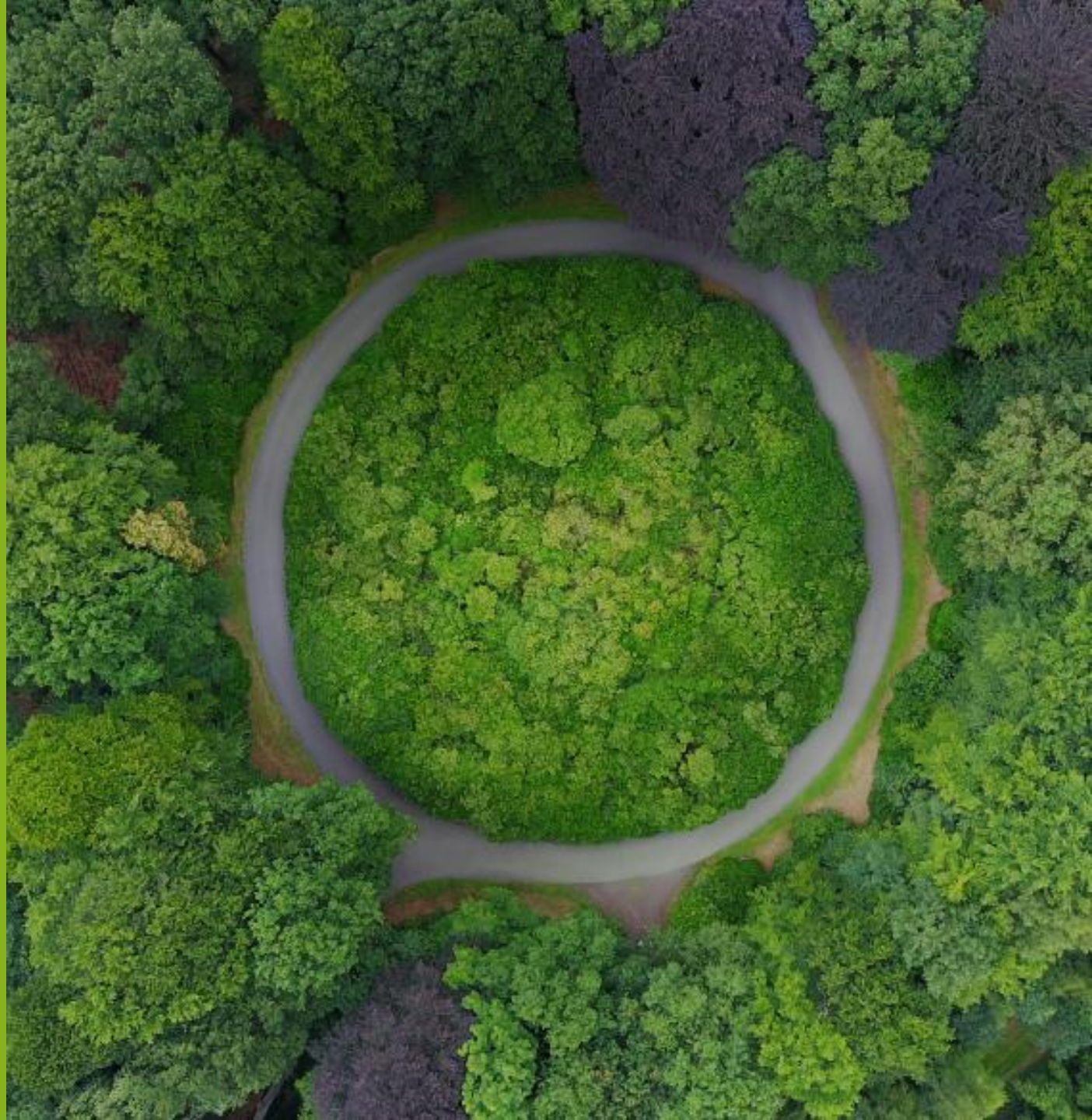
- 40 National Biogas Associations

Associated members

- 119 Companies
- 30 countries in Europe and beyond
- > 7,000 stakeholders
- Representing the biogas industry since 2009



**Growth of the
biogas and
biomethane
sector in the
past decade**



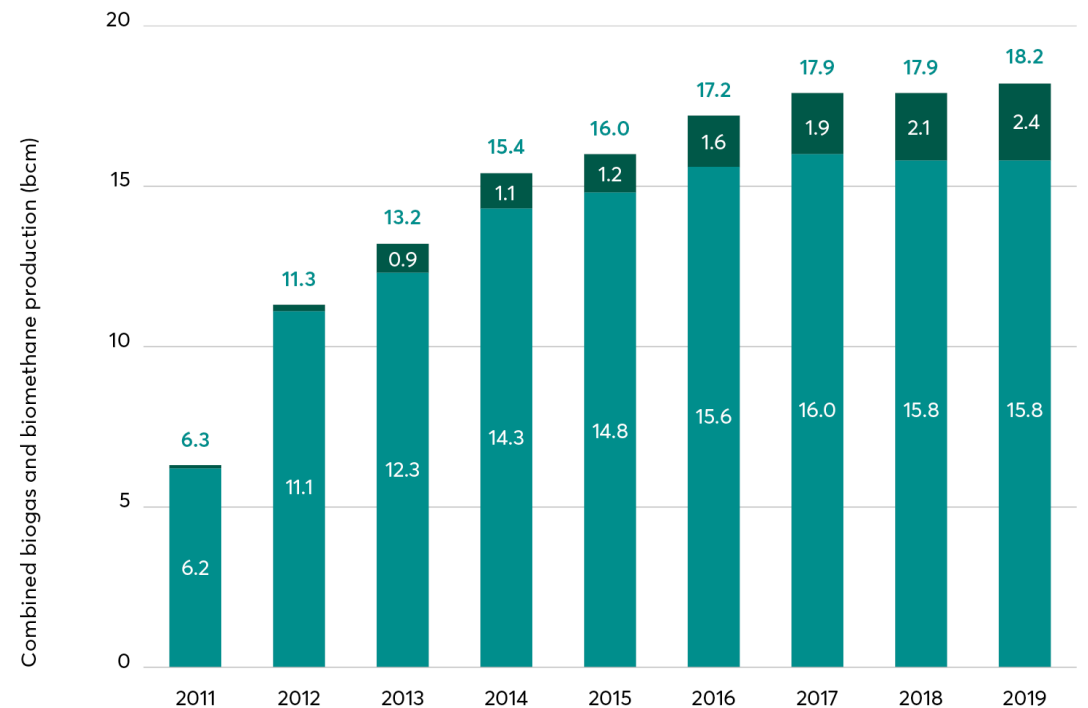
Growth in the past decade

- Continuous growth
- Increasing share of biomethane

FIGURE 6.2

Development of combined biogas and biomethane production in Europe, 2011-2019 (bcm)

■ Biogas production
■ Biomethane production

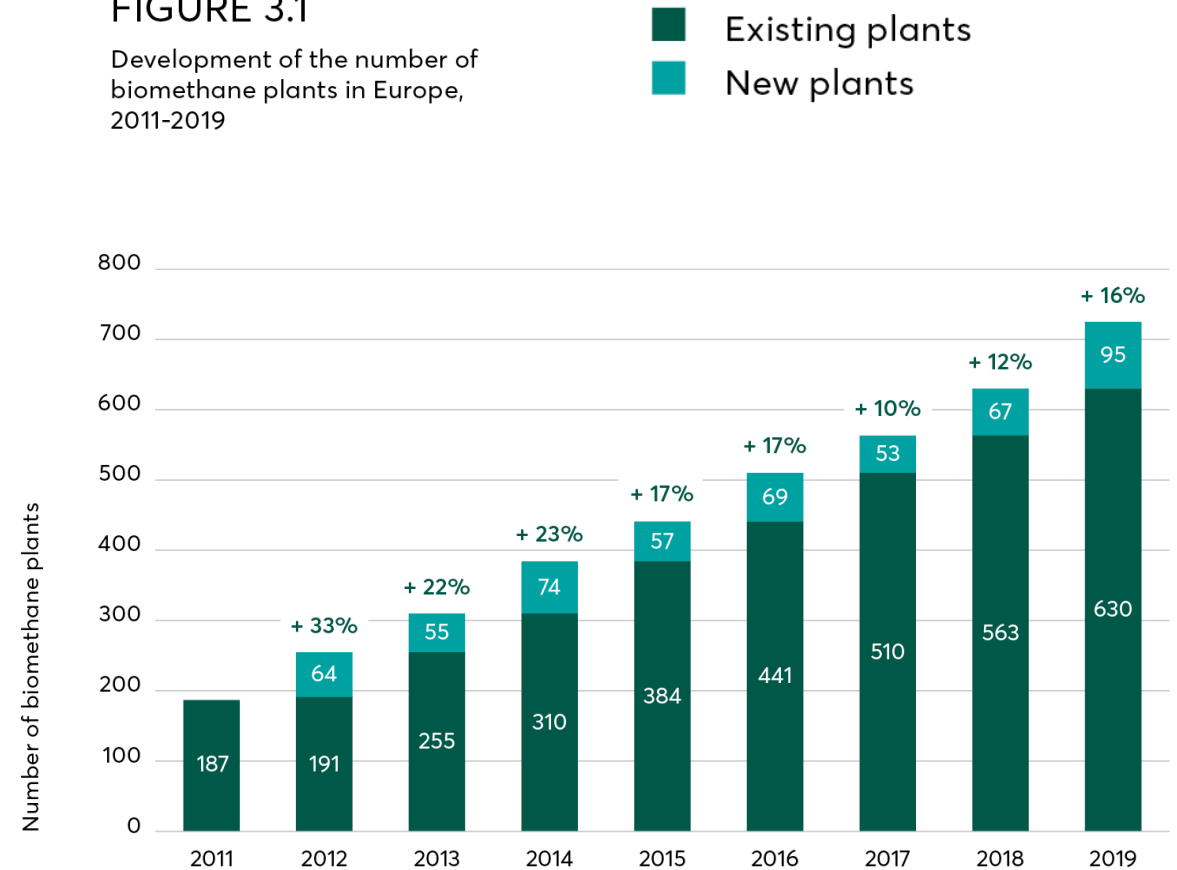


Growth of biomethane plants

- More countries are joining biomethane production
 - 2018: Belgium & Estonia
 - 2019: Czech Republic
 - 2020: Ireland & Latvia
 - 2021: Lithuania expected
- 2019 was the biggest growth year to date

FIGURE 3.1

Development of the number of biomethane plants in Europe, 2011-2019



**Growth
potential for
biogas and
biomethane
by 2030 and
2050**



FIGURE 6.1

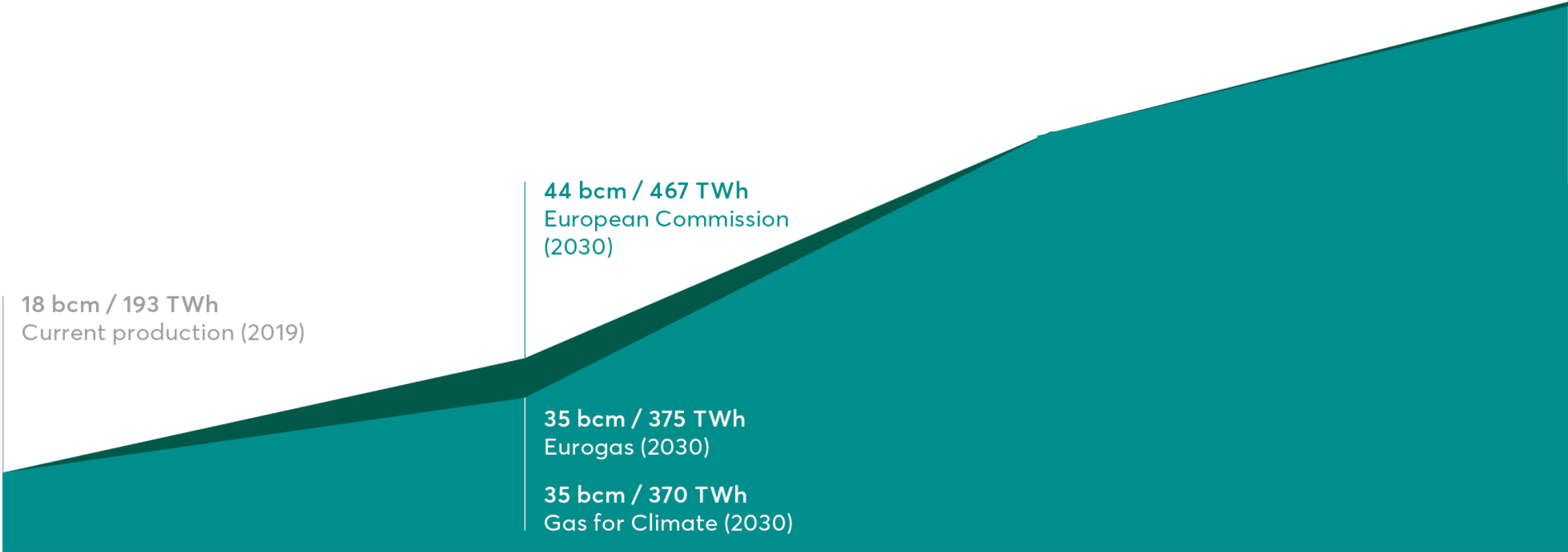
Europe's biogas and biomethane potential for 2030, 2040 and 2050, as calculated by the various studies, expressed in bcm and TWh



2019

FIGURE 6.1

Europe's biogas and biomethane potential for 2030, 2040 and 2050, as calculated by the various studies, expressed in bcm and TWh

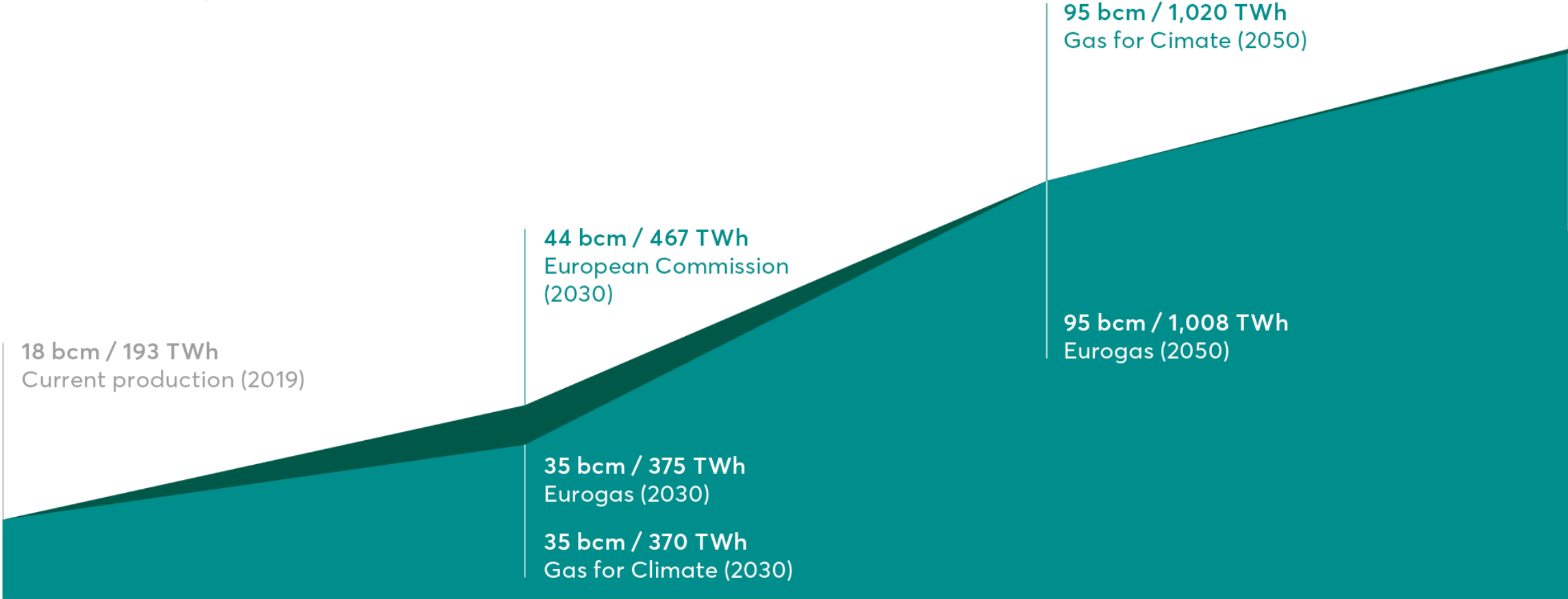


2019

2030

FIGURE 6.1

Europe's biogas and biomethane potential for 2030, 2040 and 2050, as calculated by the various studies, expressed in bcm and TWh



2019

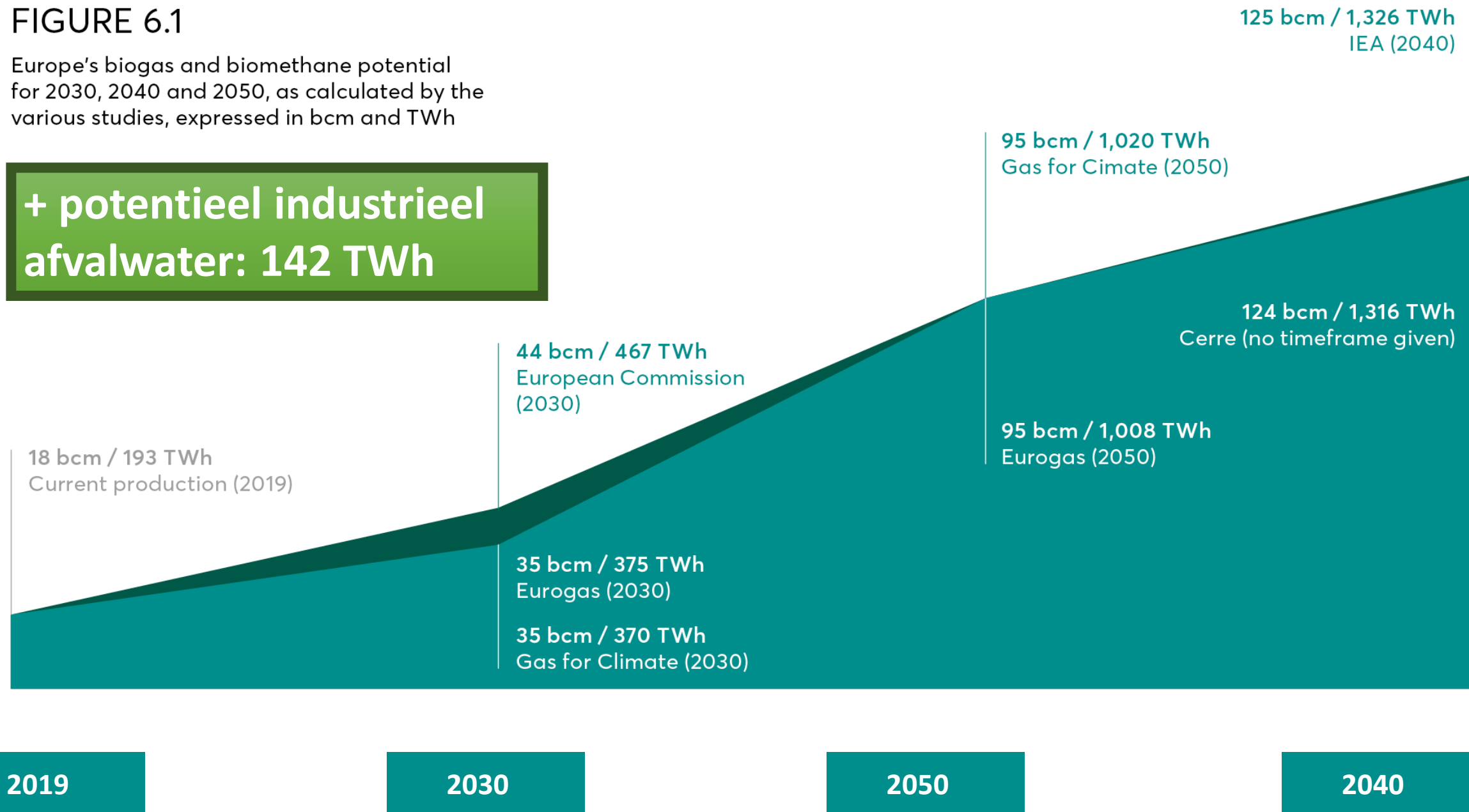
2030

2050

FIGURE 6.1

Europe's biogas and biomethane potential for 2030, 2040 and 2050, as calculated by the various studies, expressed in bcm and TWh

+ potentieel industrieel afvalwater: 142 TWh



**Feedstock use
for
biomethane
production**

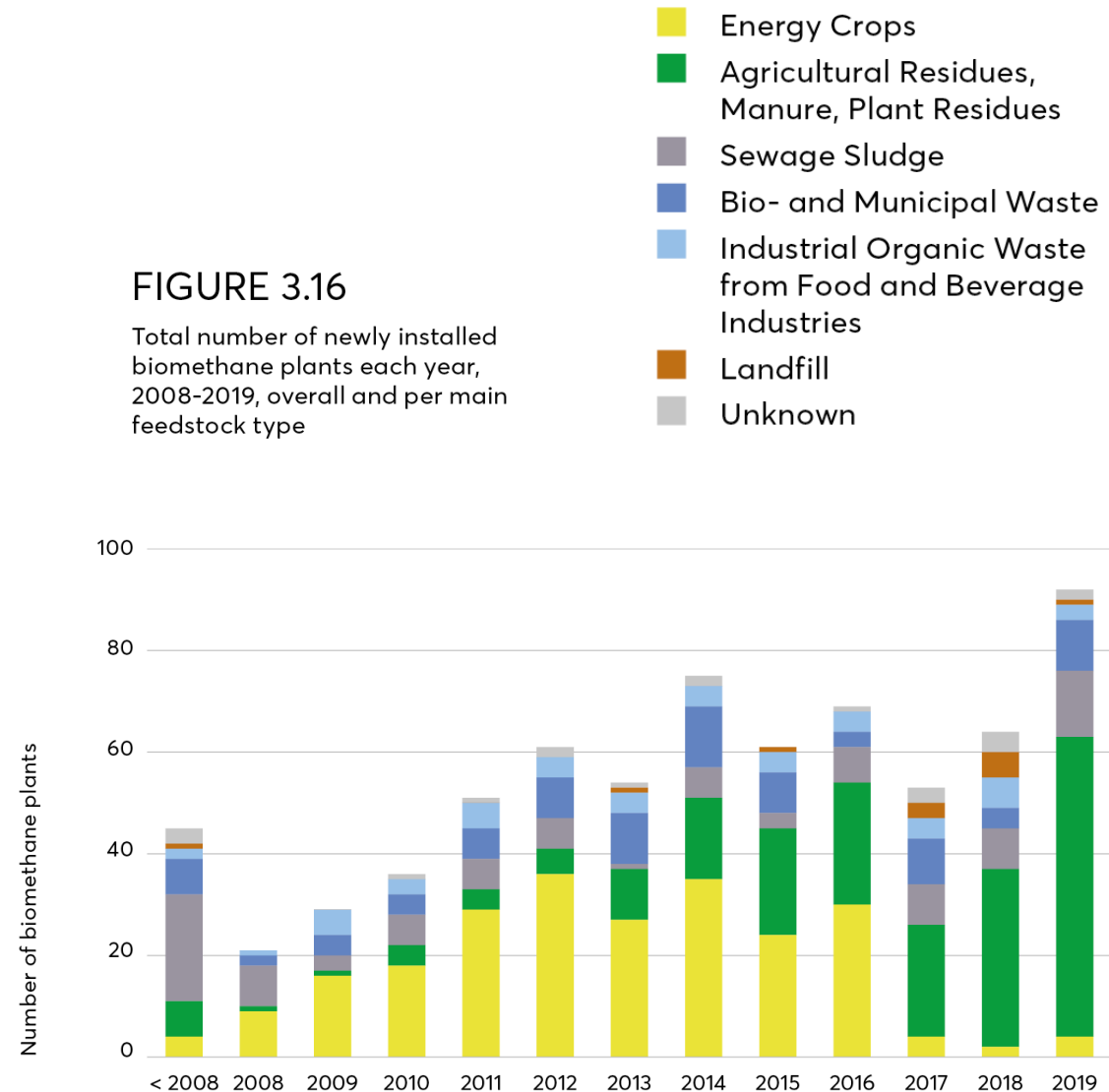


Feedstock use

- Figure shows number of newly installed plants
- Shift away from energy crops since 2013
- Almost no new plants using energy crops since 2017

FIGURE 3.16

Total number of newly installed biomethane plants each year, 2008-2019, overall and per main feedstock type



Development of the European Bio-LNG market

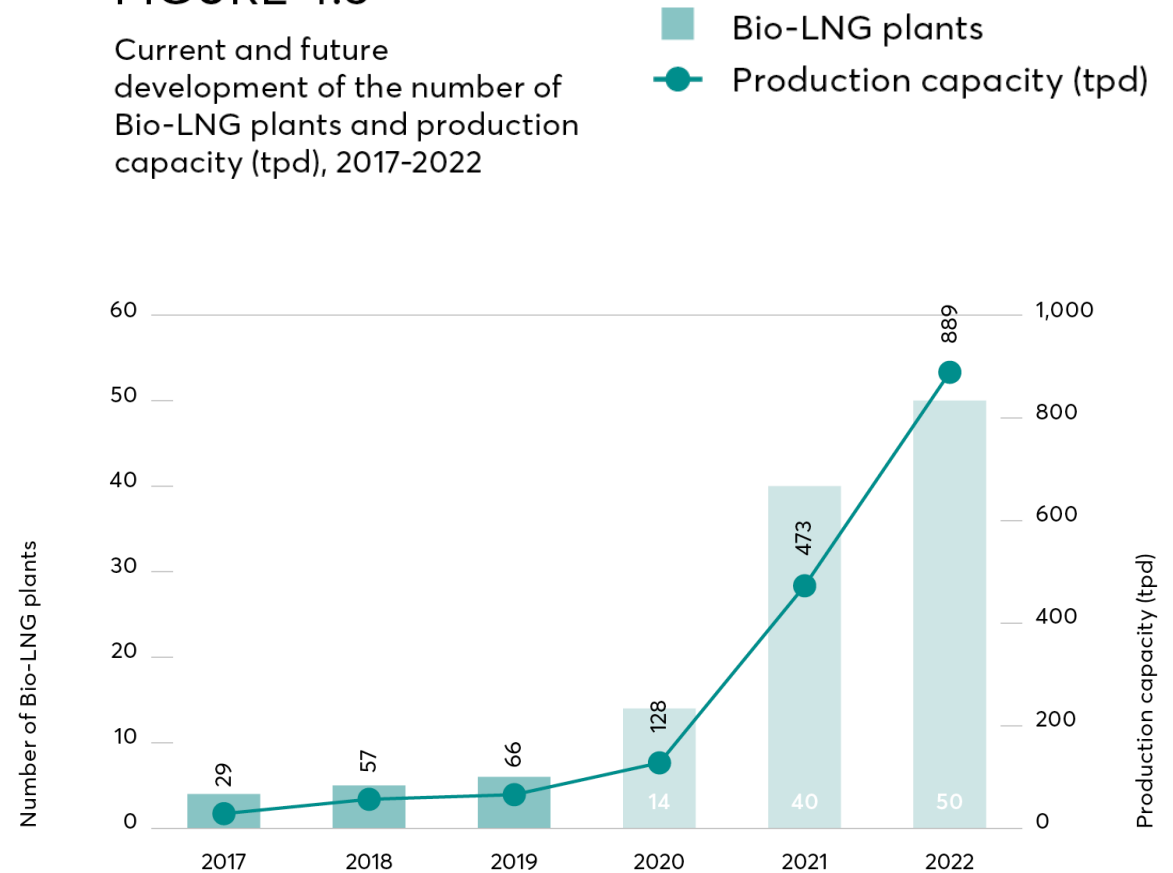


Bio-LNG market

- Includes only projects already made public
- Bio-LNG market may well rise further, if more projects are confirmed
- Trend towards bigger Bio-LNG plants

FIGURE 4.3

Current and future development of the number of Bio-LNG plants and production capacity (tpd), 2017-2022



Country analysis

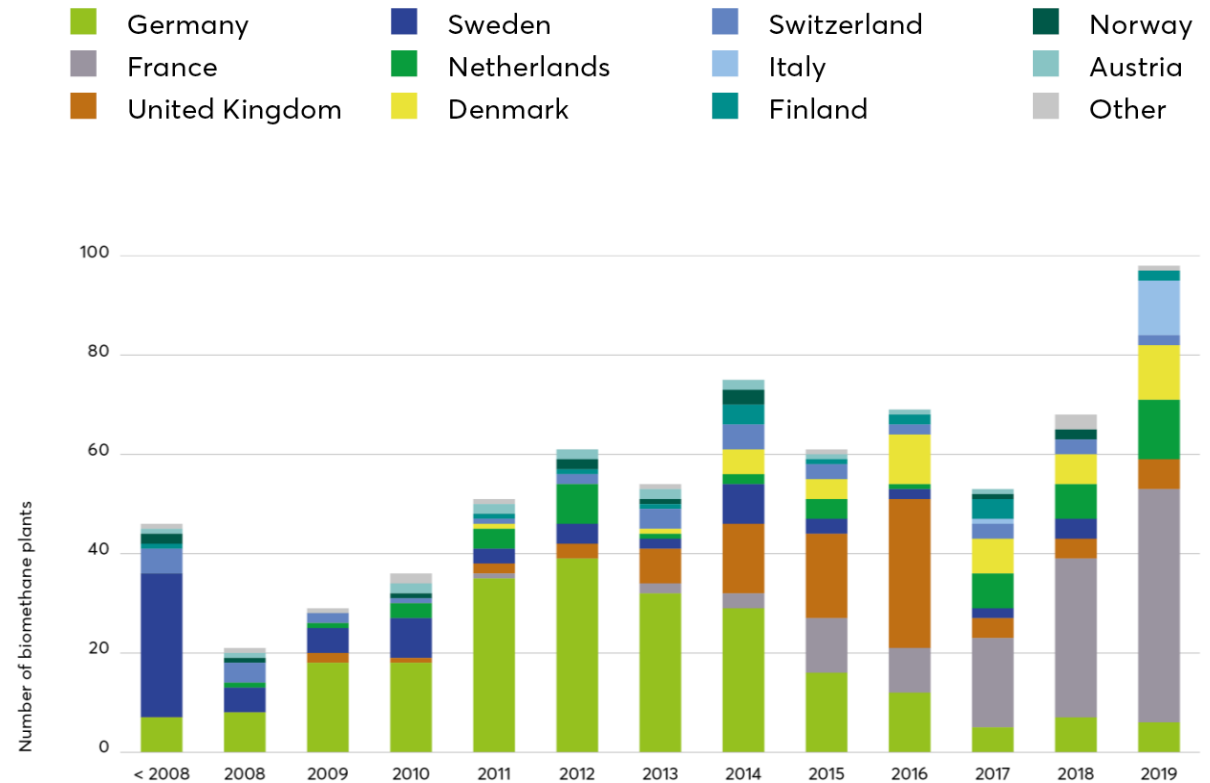


Biomethane growth per country

- German led Europe's biomethane market for almost a decade
- France is market leader since 2017
- Italy is expected to grow significantly in the years ahead

FIGURE 3.3

Number of new biomethane plants in Europe each year, 2008-2019, overall and per country





Highlights

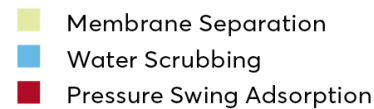
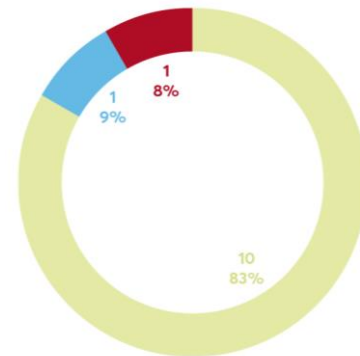
- Italy is second to Germany in terms of number of biogas plants and total biogas production
- The Italian biomethane sector is expected to grow rapidly
- Italy is expected to become a leader in the Bio-LNG market

Italy

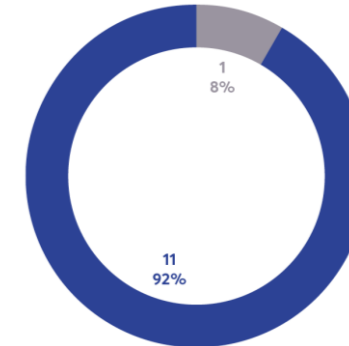


- > 1,700 active biogas plants
- 12 biomethane plants
- Mainly membrane separation is applied

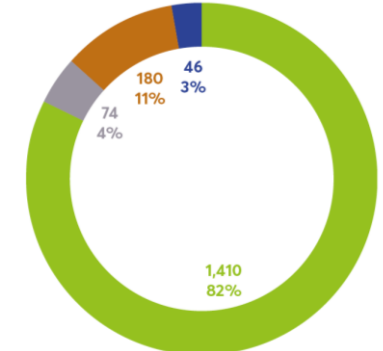
Upgrading technologies



Number of biomethane plants



Number of biogas plants

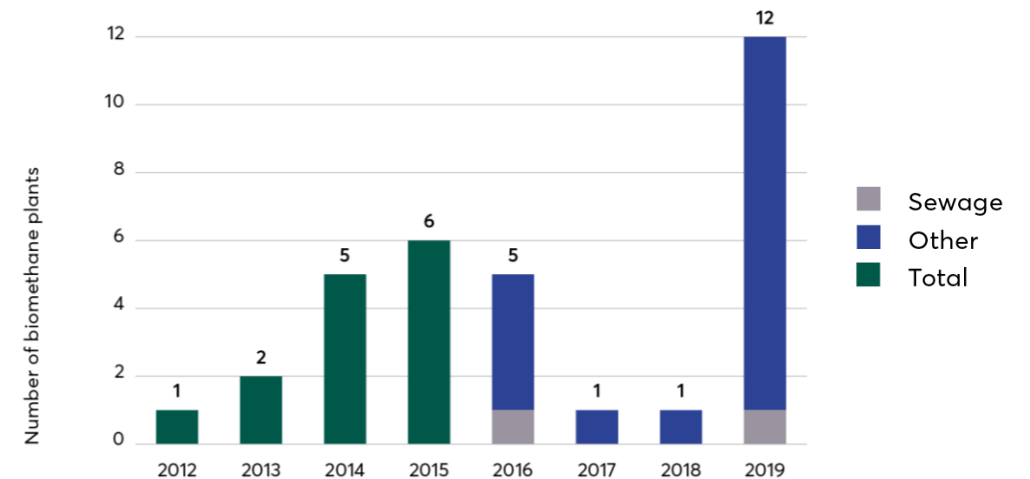


Italy



- First biomethane plant in 2012, followed by several smaller demonstration plants
- One of the fastest European growers in 2019
- Even bigger growth expected in 2020 and subsequent years

Biomethane market development



Full report

Free for EBA members

For sale at the publications
section of the EBA website:
www.europeanbiogas.eu



Further information

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