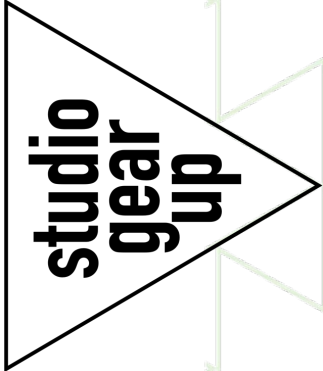


EU biomethane policies and volumes

The logo for 'studio gear up' is a black-outlined triangle pointing to the right. Inside the triangle, the words 'studio', 'gear', and 'up' are stacked vertically in a bold, lowercase, sans-serif font.

studio
gear
up

Eric van den Heuvel

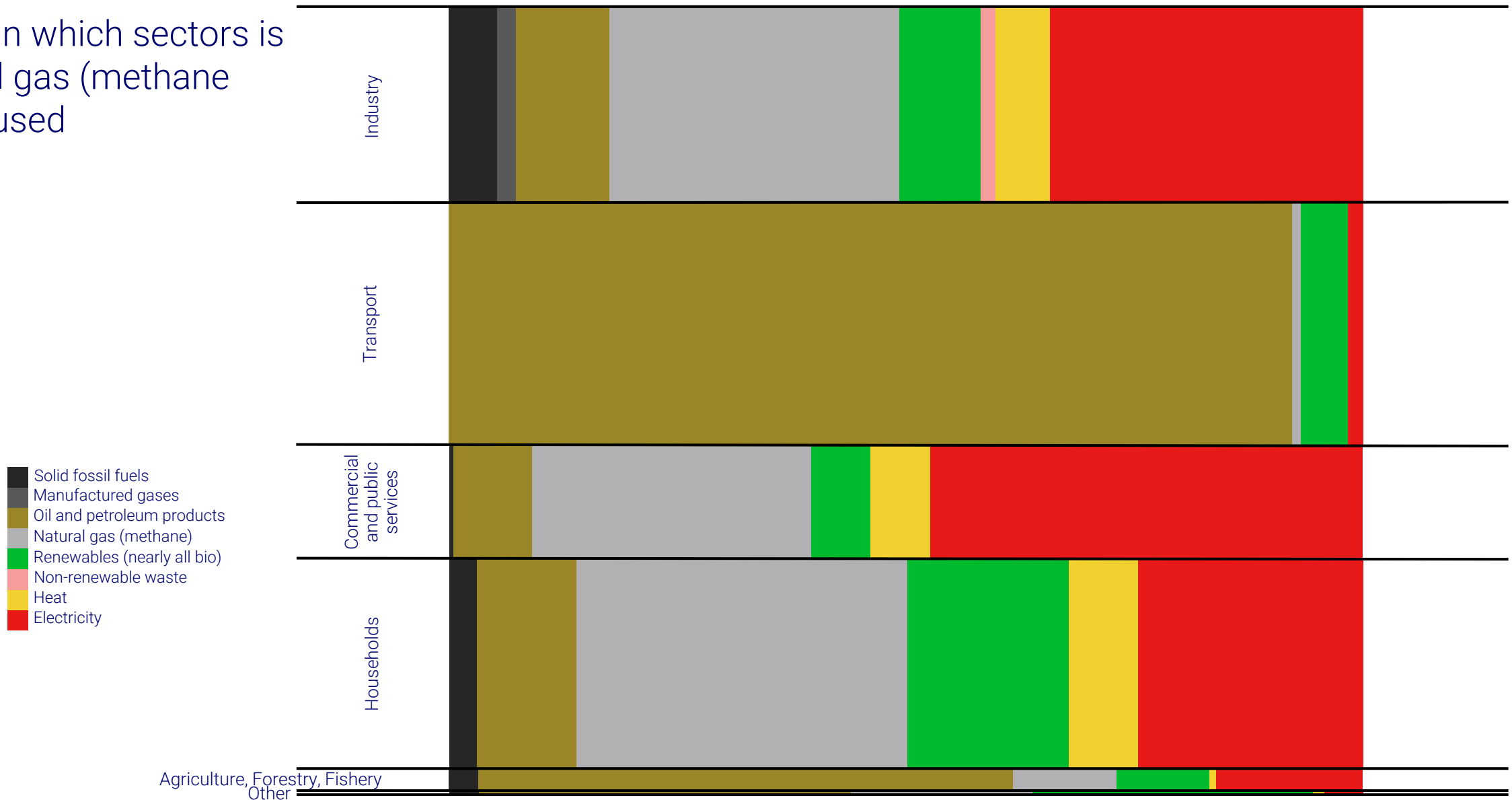
EUBCE Tripartite meeting Biomethane

23 June 2024

Marseille

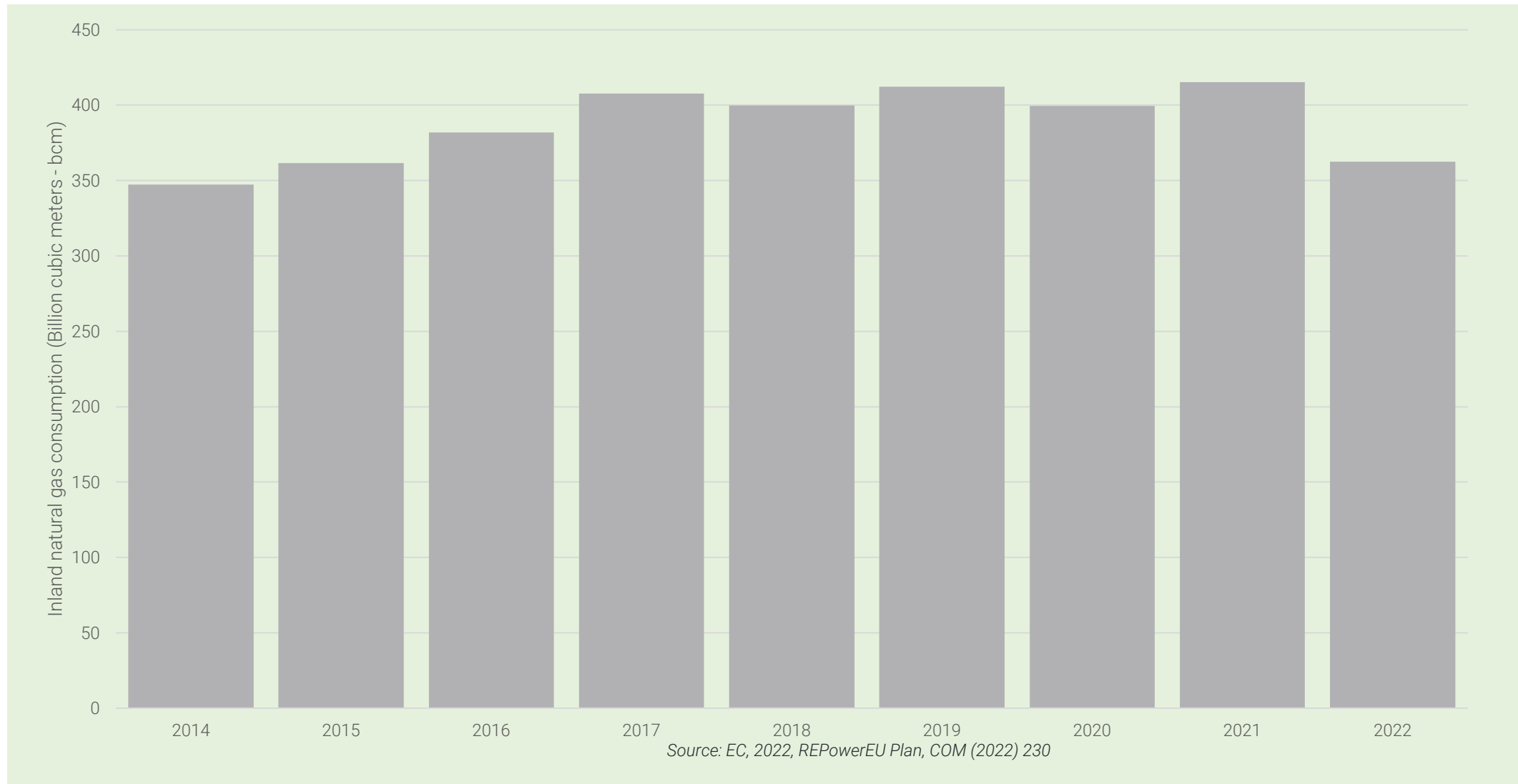
Which sources of energy are used in EU27 (data for 2018)

... and in which sectors is natural gas (methane being used



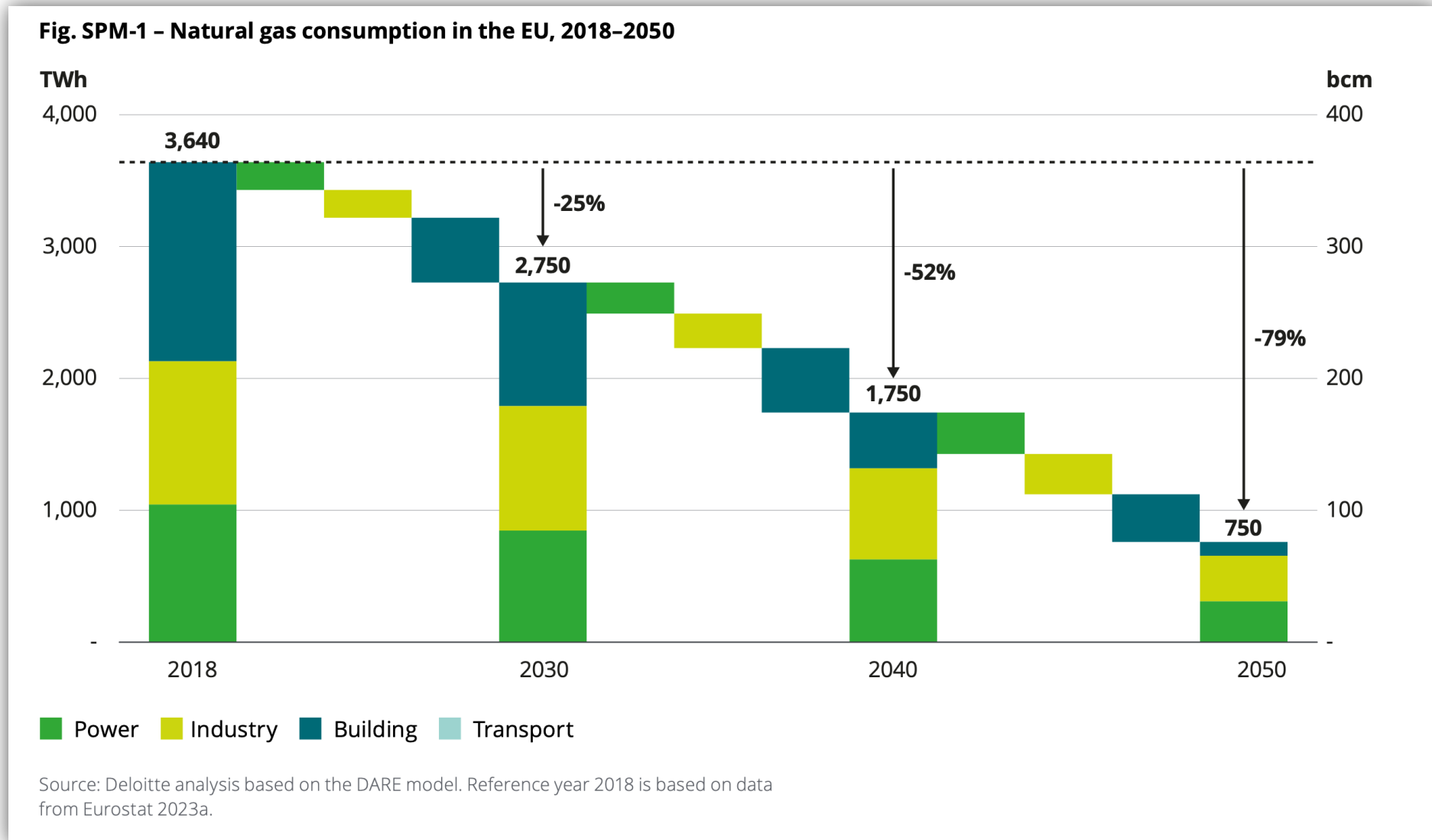
Source: Eurostat, Energy Balance, 2018 data. Data are excluding international aviation and maritime bunkering

Development of inland natural gas consumption in EU 27



Source: Eurostat, database nrg_cb_gas

How is the development of EU27 natural gas consumption expected towards 2030 and 2050?



Source: Deloitte, Oeko Institu, 2023, Natural Gas Demand Outlook to 2050

Current ambitions and policies within the EC for EU27

REPower EU Plan (COM/2022/230)

- Aims to reduce dependence on fossil fuels, especially those originated from Russia
- Builds on the implementation of Fit-for-55 package
- One of the key elements is the scaling up biomethane production
- Sets an ambitious **35 billion cubic meter (bcm) target** by 2030 for the production of biogas or biomethane
- Estimated investment to reach target is €37 billion

Renewable Energy Directive II (EU/2018/2001)

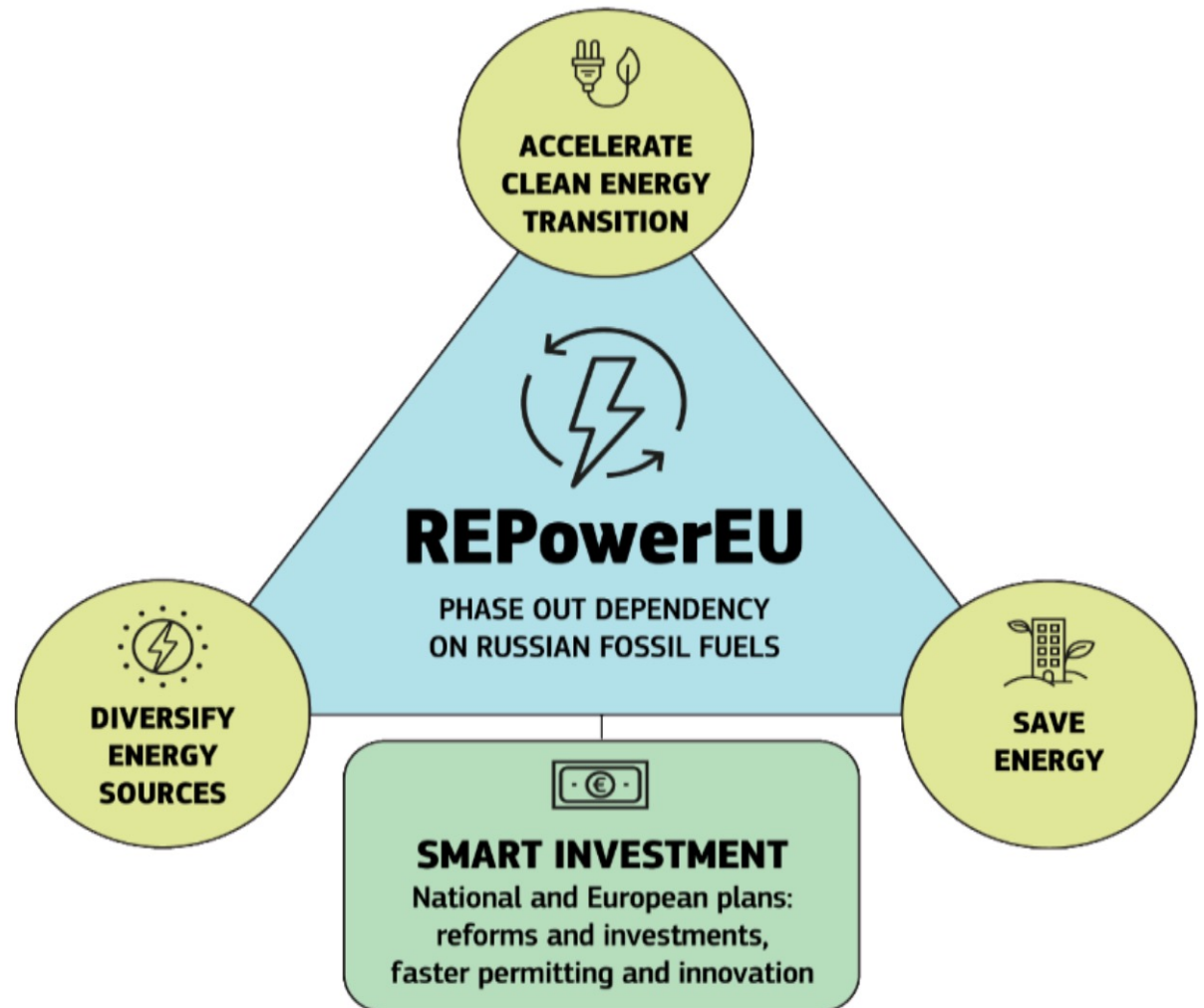
- Specific targets set for biogas

Renewable Energy Directive III (EU/2023/2413)

- Broadened scope for fuel supply obligations to cover all uses of biomethane

Waste Framework Directive (EC/2009/98)

- From 2024 all Member States need to collect organic waste separately







Source: EC, 2022, REPowerEU Plan, COM (2022) 230

Key actions to achieve the biomethane target – action plan for RePowerEU Plan

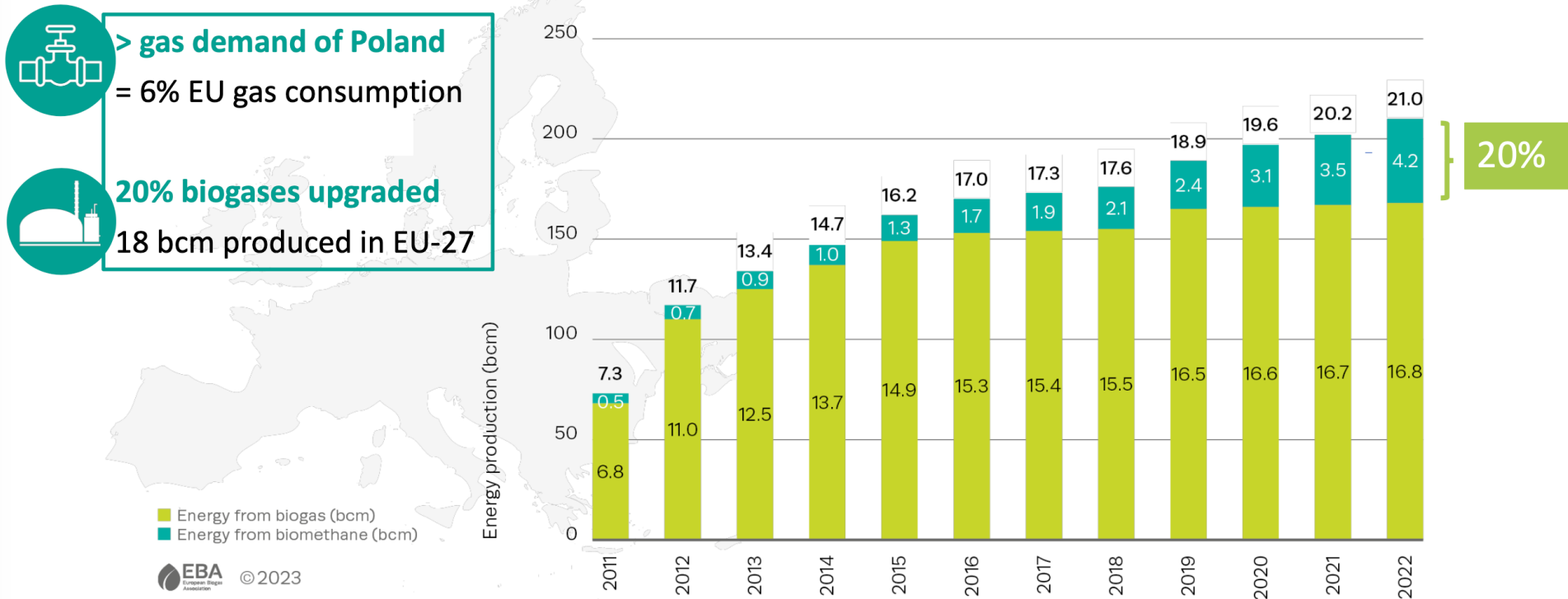
- Promote sustainable production and use of biogas and biomethane from waste and residues rather than crop-based feedstocks.
- Creation of the Biomethane Industrial Partnership to support implementation activities and facilitate engagement between the EC, Member States, industry, supply chain, academics and NGOs.
- Provide incentives for biogas upgrading into biomethane
- Promote the adaptation and adjustment of gas infrastructure for the increased shares of biomethane
- Address R&D&I gaps by provide additional funding for innovative biomethane technologies development and upscaling
- Enhance access to diverse finance possibilities such as grants, loans, funds, subsidies
- Ease the permitting process of renewable energy projects – as recommended by the Commission in C(2022)3219 document

Delivering the 35 bcm biomethane by 2030

	 PLAN FOR RAPID EXPANSION OF BIOMETHANE CAPACITY	 PROMOTE EASY MARKET ACCESS	 FINANCE	 SUSTAINABLE FEEDSTOCK MOBILISATION
2022	<p>Stimulate the demand side by anchoring the 35 bcm target to binding legislation, implementing green gas blending obligations and connecting biomethane production to the EU ETS sectors.</p> <p>Faster approval of support schemes by the EC, such as the Italian Recovery and Resilience plan which was submitted to DG Competition on 17 November 2021.</p> <p>Allow for higher production volumes than what is currently included in subsidy contracts.</p>	<p>Facilitate the physical injection of biomethane into the gas grid by installing reverse flow facilities, prioritising gas grid injection for biomethane and increasing cooperation between adjacent gas grid operators.</p> <p>Speed up permit-granting processes by establishing one-stop shops, regulated review times and transparent communication to the actors requesting permits.</p>	<p>Development of national biomethane targets and strategies which include faster provision of investment support, incentives for switching biogas-CHP plants towards biomethane plants.</p> <p>Establish a European guarantee fund to prevent long lead times of biomethane equipment while mitigating the risks linked to raw material price volatility.</p> <p>Mobilise investment capital by setting up a public-private cooperation and encouraging commercial banks to provide debt financing for biomethane projects.</p>	<p>Maximise mobilisation of sustainable feedstocks such as waste and wastewater by, for example, implementing a ban on incinerating and landfilling food wastes and organic wastes and the obligatory subsequent treatment of organic wastes.</p>
2023 – 2025	<p>Disseminating best practices across European regions.</p> <p>Award biomethane sustainability recognition compared to fossil alternatives.</p> <p>Establishment of spatial planning by local governments indicating zones which are suitable for renewable gas production.</p>	<p>Further facilitate cross-border trading of biomethane in all EU member states by establishing a European-wide straightforward and transparent Guarantees of Origin system that integrates sustainability information.</p> <p>Advance the EU wide digestate market by updating regulations to consider existing technical advancements in digestate upgrading, developing standards for digestate (CE standard) to allow for EU wide trade and implementing the RENURE criteria.</p>	<p>Exempt operational aid for biomethane production from state aid rules, as per the General Block Exemption Regulation (GBER)</p> <p>Diversify the incomes of biomethane producers by valorising the positive externalities and synergies of biomethane production.</p>	<p>Allow for the addition of sustainable sequential cropping by including sequential cropping in the list of advanced feedstocks (Annex IX of the Renewable Energy Directive).</p>
2026 – 2030	<p>Improve the AD image to improve political and public acceptance by launching an EU-wide image campaign.</p>	<p>Implement the preferred use of biogenic CO2 compared to fossil-based CO2.</p>	<p>Increase research funds to ensure the market entry of new technologies such as gasification and innovative biomass pretreatment steps.</p>	<p>Increase the EU biomethane potential by converting CO2 effluents to additional biomethane. This can be done by increasing the number of research and pilot projects for demonstrating and promoting this conversion.</p>

Production of biogas and biomethane (combined) in EU27, 2011-2022 period)

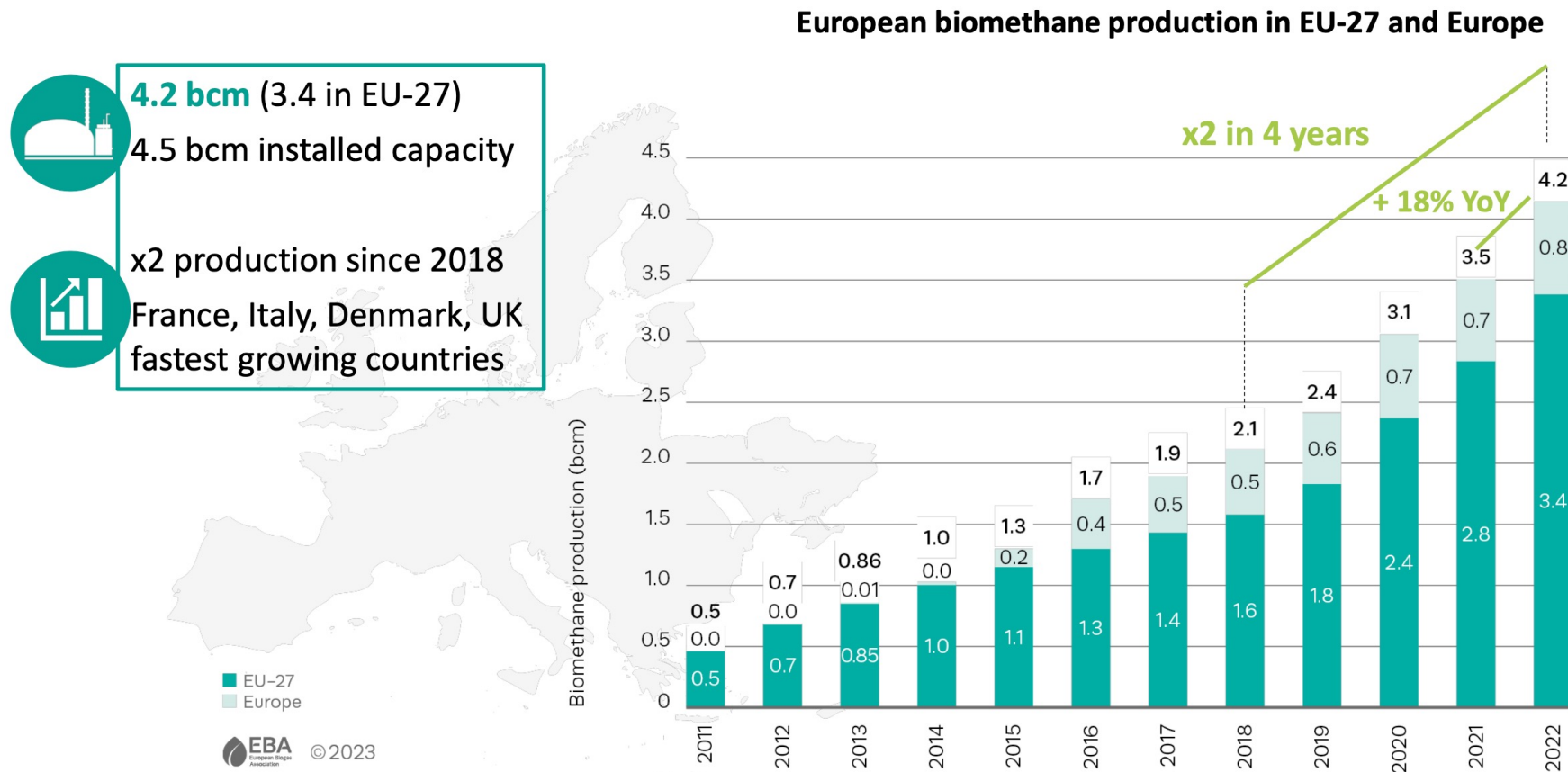
Europe produced 21 bcm of biogases in 2022



Source: EBA, 2023, Statistical report 2023 – Launch webinar slidedeck

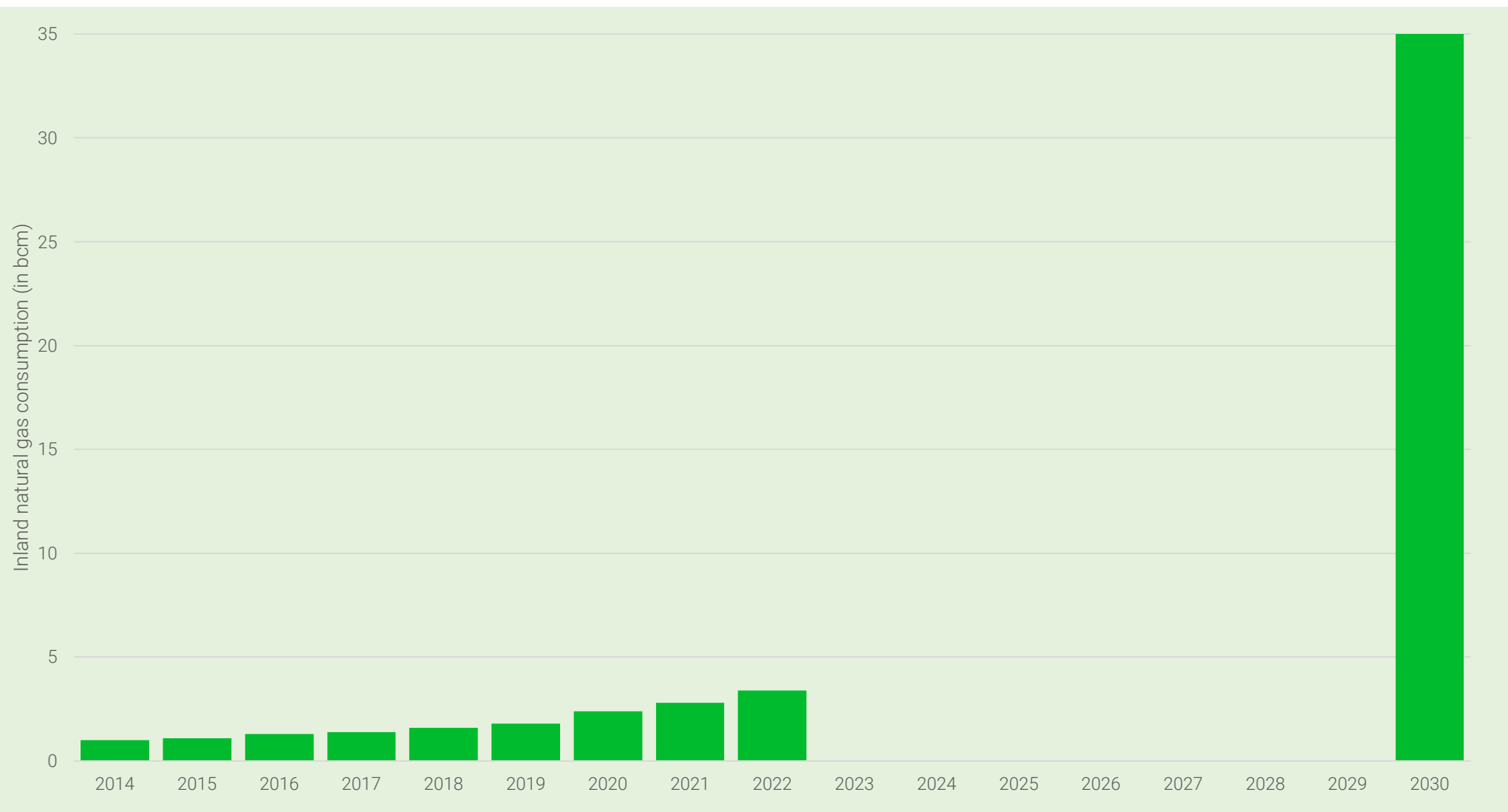
Zooming in on the development of biomethane production in EU27

18% more biomethane in Europe in 2022



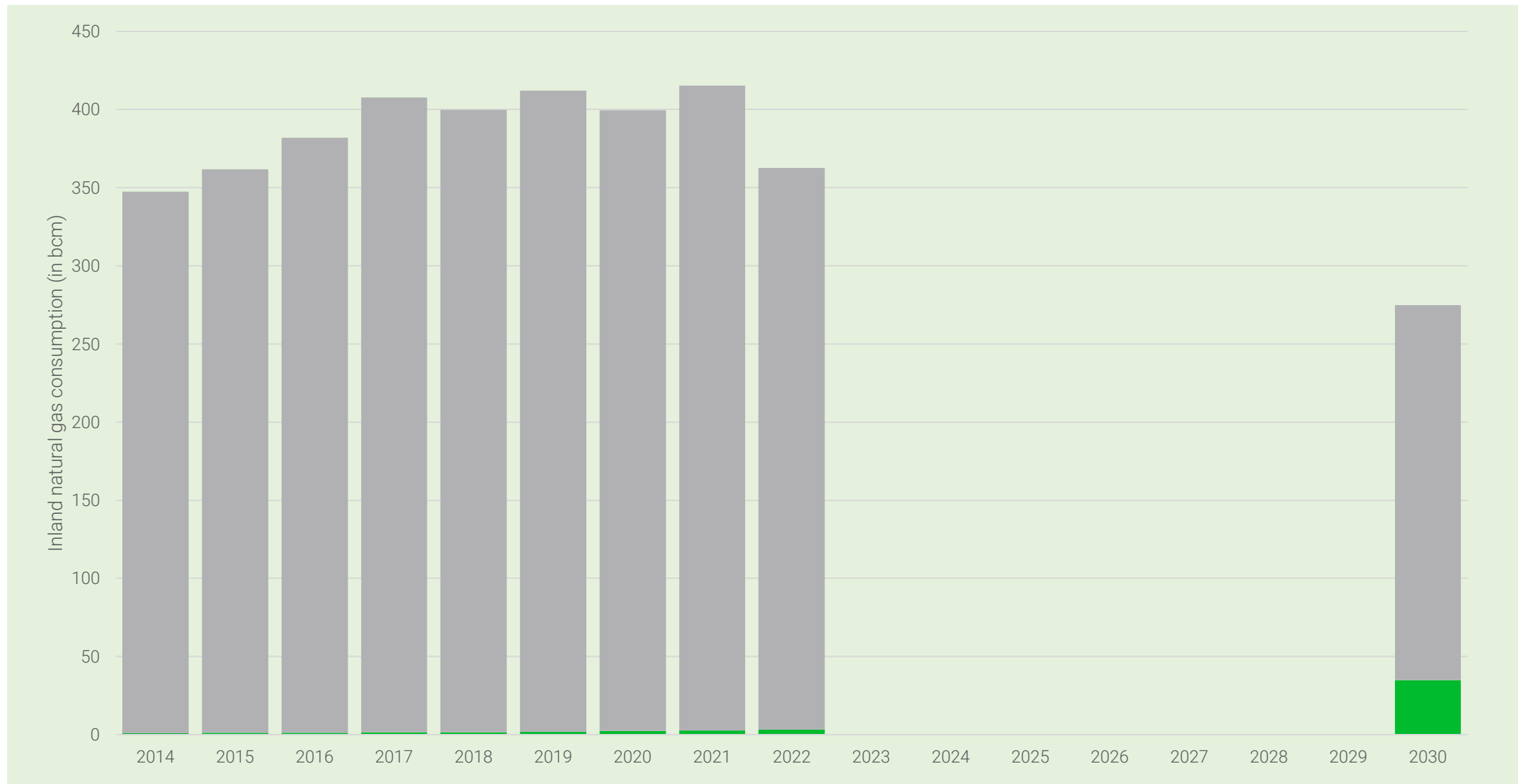
Source: EBA, 2023, Statistical report 2023 – Launch webinar

The RePowerEU ambitions are quite impressive....



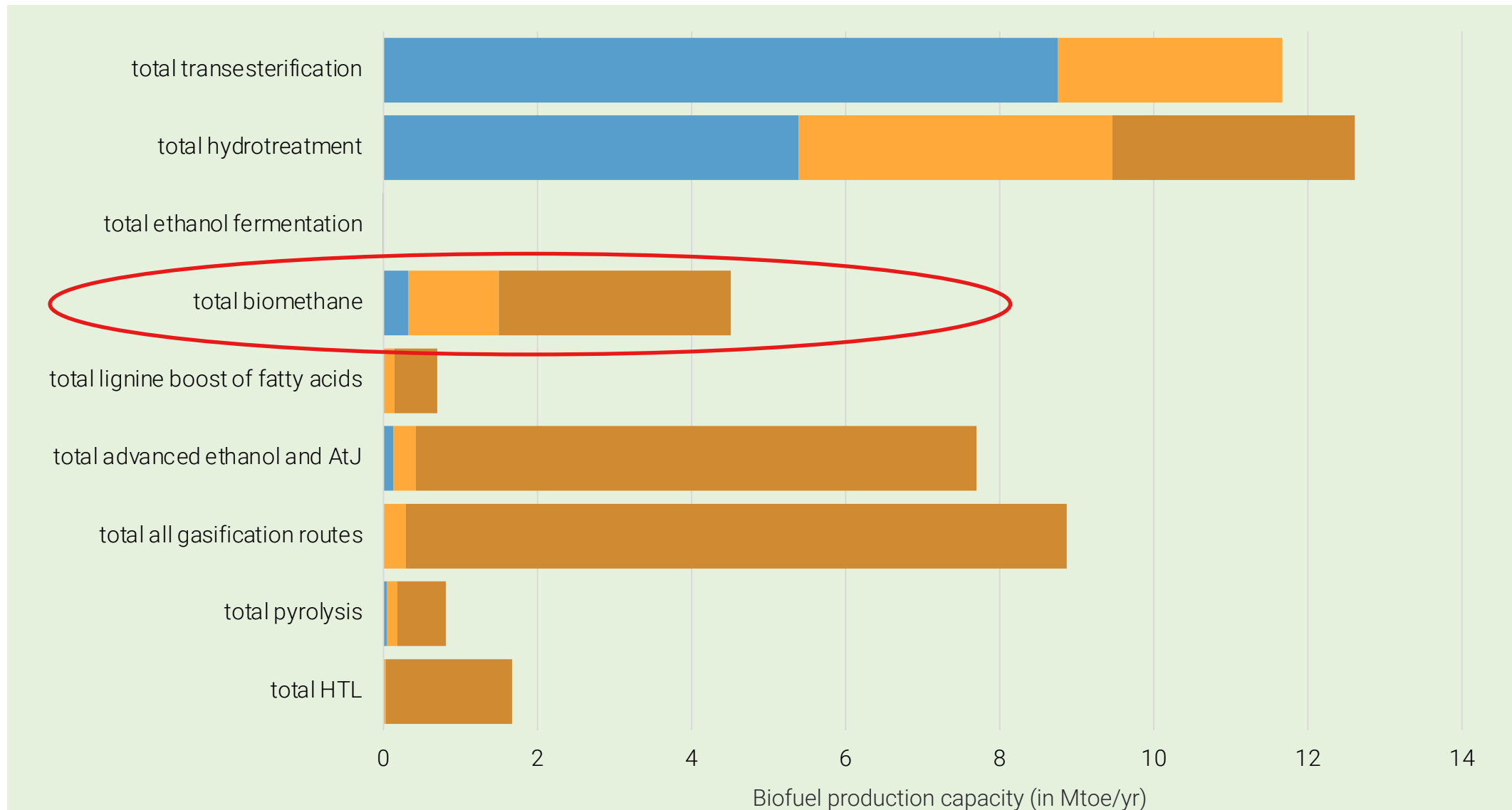
Source: Eurostat, database nrg_cb_gas, for data natural gas 2014-2022; EBA, 2023, Statistical report, data for 2014-2022; Deloitte and Öko Institut for 2030 total methane demand; EC, 2022, RePowerEU ambition biomethane 2030

The RePowerEU ambitions are quite impressive.... but in 2030 in total expected methane demand still very moderate



Source: Eurostat, database nrg_cb_gas, for data natural gas 2014-2022; EBA, 2023, Statistical report, data for 2014-2022; Deloitte and Öko Institut for 2030 total methane demand; EC, 2022, RePowerEU ambition biomethane 2030

For Biomethane in transport also production capacity expansion is expected towards 2030 and 2050

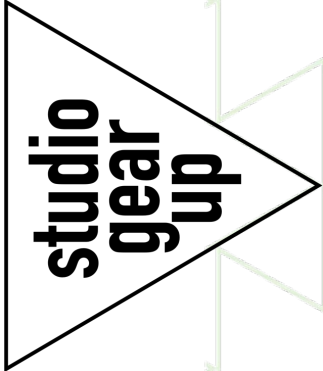




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