



# Biogas as a key technology for nutrient recovery?

ESNI conference, 18 September 2024

*Laure Baillargeon, policy officer  
European Commission, DG GROW*

# EU priorities linked to biogas/biomethane

- Climate change and renewable energy targets
- Substitution of Russian gas and other fossil energy (RePowerEU)
- Resilience/security of the EU economy

⇒ EU target = 35 bcm of sustainable biomethane by 2030

≈ decoupling EU 2021 production

# Biomethane industrial partnership (BIP)



- Launched in 2022 (part of the RePowerEU Plan)
- Objective: support the achievement of the EU target and help create conditions for further ramp up

Join the work of the BIP  
[www.bip-europe.eu](http://www.bip-europe.eu)

# BIP Task Forces



**Task Force 1**  
National strategies

National targets, strategies and policies, feeding into the NECP process.



**Task Force 2**  
Project development

Best practices, creative solutions and barriers to speed up investments



**Task Force 3**  
Innovative biomass sources

EU-wide potential for innovative (additional) biomass sources



**Task Force 4**  
Cost efficiency

Best practices for efficient and low-cost biomethane production and grid injection.



**Task Force 5**  
R&I

Current status of R&D in biomethane production and needs for innovation to be commercialised



**Task Force 6**  
Ukraine

Unlock biomethane production in Ukraine

# BIP Task Forces



**Task Force 1**  
National strategies

**22 Member States**  
More info [here](#).



**Task Force 2**  
Project development

**2 subgroups**  
• cross-border trade  
• **digestates valorization** & waste feedstocks  
More info [here](#).



**Task Force 3**  
Innovative biomass sources

**2 subgroups**  
• sequential/rotational cropping  
• innovative feedstocks  
More info [here](#).



**Task Force 4**  
Cost efficiency

**2 subgroups** on efficient and low-cost biomethane production and grid injection, including e-methane production.  
More info [here](#).



**Task Force 5**  
R&I

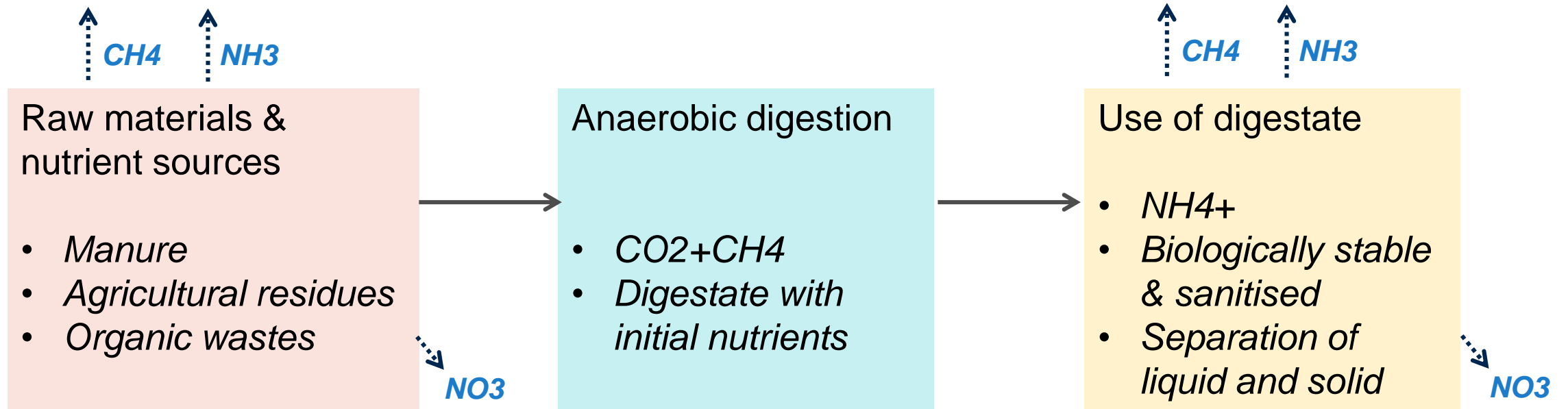
**2 subgroups**  
• **valorization of digestate**  
• methanation technology  
More info [here](#).



**Task Force 6**  
Ukraine

Kicked off in April 2024 and is currently working on 3 deliverables.  
More info [here](#).

# The biogas/biomethane model



## GHG avoided

- Fossil gas/electricity
- Lower  $CH_4$  emissions than with same feedstock landfilled or spread
- Fossil-based fertilisers

# Digestates' valorisation as part of the biogas/biomethane model

## Farming practice

- Fertilisation
- Equipment



## Soil health

- Microbiology
- SOC
- Pathogens

## CO2 reduction

- Avoided CO<sub>2</sub>/CH<sub>4</sub>
- Reduced CH<sub>4</sub> and NH<sub>3</sub>
- SOC

## Research and innovation

- New valorisation technology
- Research needs

## Economics

- Business model
- Fertilising product market

⇒ Biogas/biomethane as key technology for 1) carbon farming and 2) sustainable, EU-sourced nutrients?

# Two BIP reports upcoming

Novel technologies and research needs for improving digestates valorisation (Task Force 5)

- Promising technologies

Use and valorisation of digestates: a practical review (Task Forces 2, 3, 4 and 5)

- Good practices for return to soil without post-processing
- Case studies (>TRL9) for valorisation of digestates into fertilising products
- Environmental and economic benefits
- Barriers to further valorisation (market, regulatory)



# Parallel session 1 - Technology

Novel technologies and research needs for improving digestates valorisation (Task Force 5)

- Full presentation
- Q&A

Use and valorisation of digestates: a practical review (Task Forces 2, 3, 4 and 5)

- Preliminary findings
- Q&A

# Thank you