



Nedgia, key in the energy transition

Distributing green gas, to power a sustainable future



## Largest energy distributor in Spain

We supply energy to more than 15 million people

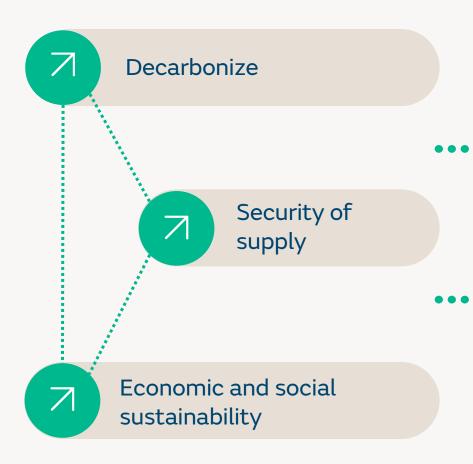
- 182 TWh/y\* supplied
- 5,5 million Supply points
- **1.222** municipalities
- **90.000** jobs created
- **59.420** km network

- Nedgia distributes energy in the form of molecules with an excellent service standard and is best-in-class in efficiency
- We are present in 11 autonomous communities, representing 70% of the national market
- Our distribution network is essential for the flexibility of the energy system and already supplies green gas throughout the country, safely and efficiently
- Distributing energy in the form of molecules is the most economical option. Distributing the same amount of energy in the form of molecules is six times more economical than in the form of electrons



## Green gas: a true "national opportunity"

Green gas is the energy that best resolves the energy trilemma



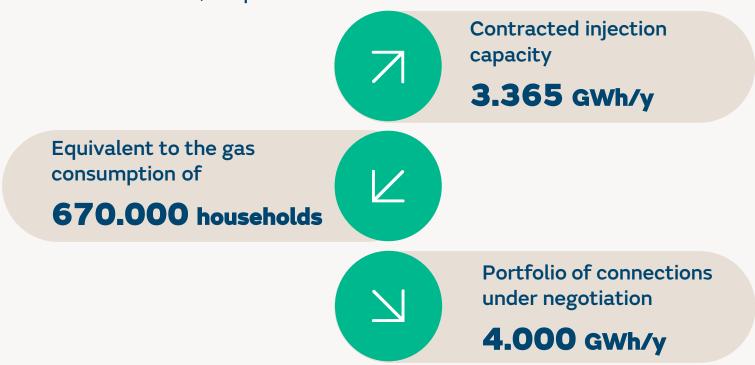
- In Spain has the third largest biomethane production potential in the EU, with 163 TWh/y
- This potential would allow the country to decarbonize 100% of domestic consumption and 62% of industrial consumption
- Biomethane is produced using indigenous resources, improving our energy independence
- Biomethane is the only renewable energy source without a seasonal component (24 hours a day, 365 days a year)
- At no cost to citizens. It's 100% compatible and requires no modifications to the customer's gas infrastructure or equipment
- It creates an opportunity for economic development and job creation in rural areas
- ✓ Solves a serious waste problem, generating a new economy.
- ☐ It is a mature technology with a great boom in its development



## Nedgia is the leader in injecting green gas into the energy system

Our network contains 80% of Spain's green gas potential

- ✓ We bring renewable energy to homes and industries by leveraging existing infrastructure.
- Promoters of the "Gas Verde, Sí" platform

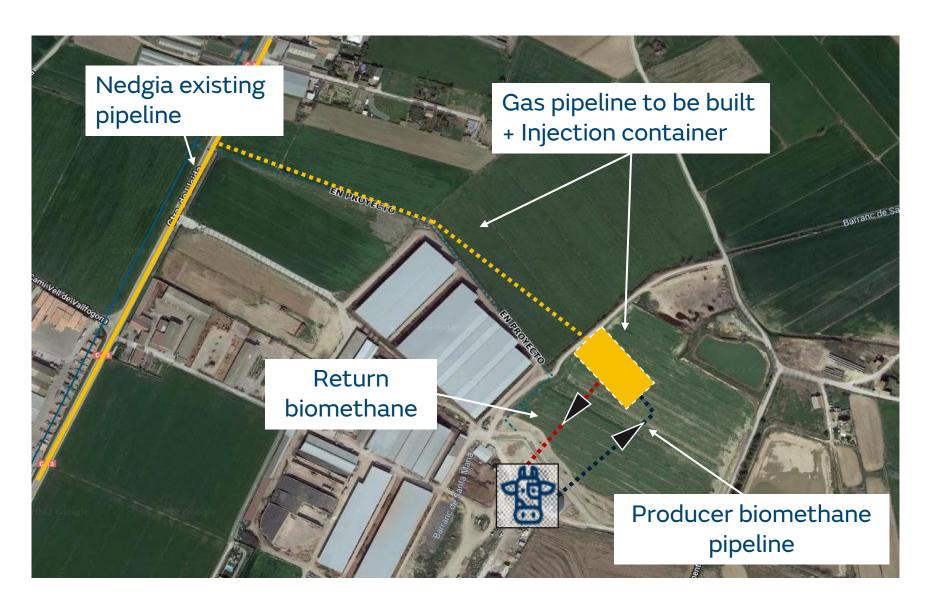


Data as of June 2025

Nedgia is promoting the injection of green gas into the Spanish energy system through its grid, which is already prepared to transform the energy model and activate the country's renewable potential

## Injection to the gas grid: DSO scope of works





Existing Nedgia grid

Injection container (Nedgia's ownership)

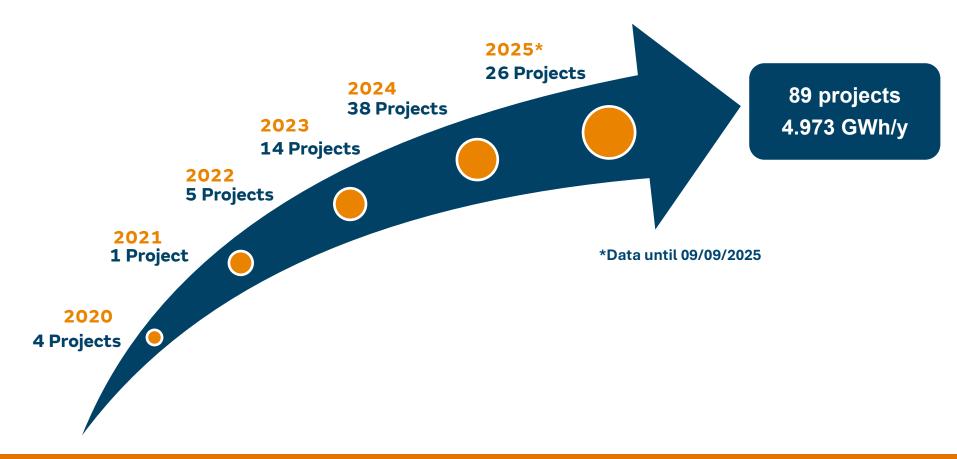
New pipeline to be built by Nedgia

Producer biomethane pipeline

Producer return biomethane pipeline

## Injection to the gas grid projects (Nedgia)

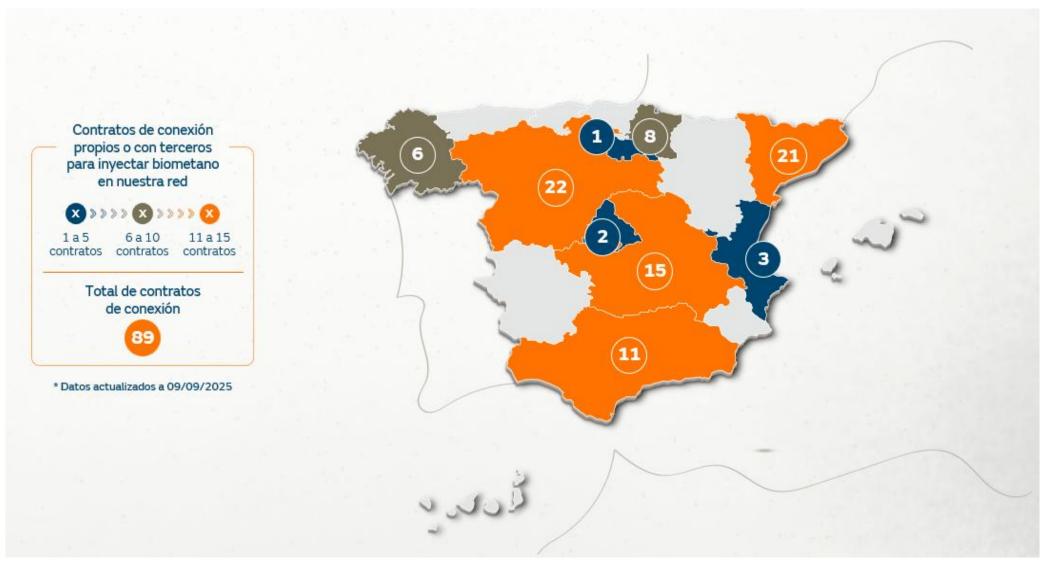




The signed contracts have an injection capacity equivalent to the gas consumption of more than 990,000 homes

# Injection to the gas grid projects (Nedgia)

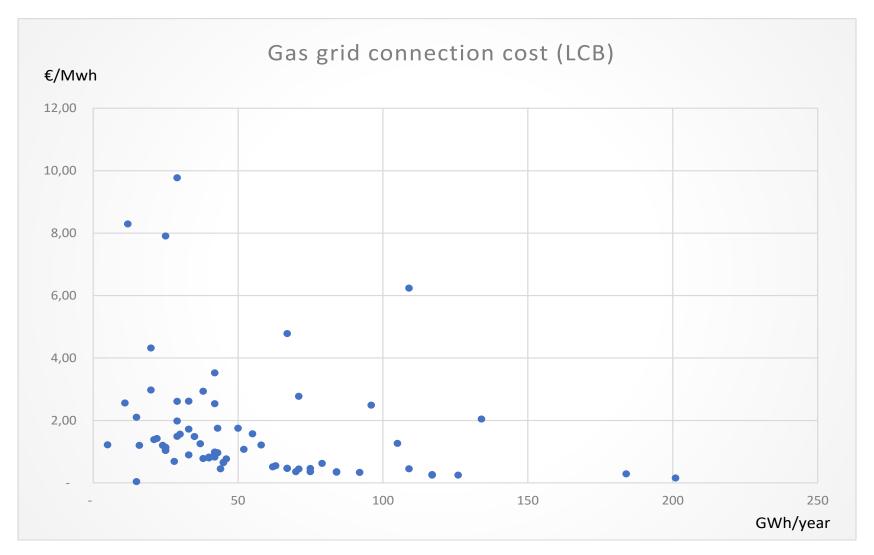




# Injection to the gas grid projects (Nedgia). Economic impact

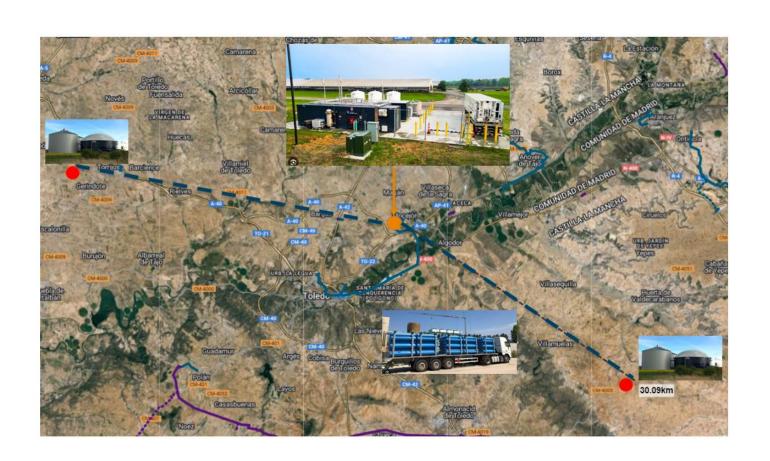


Cost of infrastructure (10-year period) in €/MWh of biomethane produced



## Centralized injection point projects (Nedgia)





#### 3 projects (1 in operation)

#### **DSO** scope of works:

- New pipeline (very close to the existing grid)
- Injection container

#### Plant owner scope of works:

- Biomethane compression at plant site
- Tub trailer transportation
- Biomethane decompression at injection container site

## **Centralized injection point**



#### Type 1 projects

#### PROJECT DESCRIPTION

 One or two biogas plants with a capacity of 600-1500 Nm<sup>3</sup>h, located at >15 km away from the gas grid

## Type 2 projects

#### PROJECT DESCRIPTION

 Several small biogas plants with a capacity of 200-400 Nm³h each one. All of them located at max. 20 km away from the gas grid.

#### Levelized gas infrastructure cost: 6-14 €/MWh\*

#### Scenarios analyzed:

- Distance between 15-50 km
- Plant capacity between 40-160 GWh/year

## Project CycleO (FNX) - Spain (in operation)



#### **PROJECT DESCRIPTION**

- 4 biogas plants with a capacity of 250 Nm³h each one. All of them located at a distance of 6-20 km aways from the gas grid.
- Each plant can't assume the gas infrastructure cost to build the pipeline connection. A unique injection point is proposed to be shared.

#### **Injection location:**

Input pressure: 250 BarInjection pressure: 17 Bar

Max. Injection Flow: 750 Nm<sup>3</sup>h

- Distance to the gas grid: 30 meters

- Decompression module: First from 250 bar to 60 Bar, second from 60 bar to 18 bar.

- Gas quality analyzer measures on a continuously basis.

#### **Transportation:**

- Transport by tube trailers.
- Charge capacity of each tube trailers: 4.000 Kg BioCH4 (250 Bar), 60 MWh
- Discharge time at injection point 8 hours

#### **ADVANTAGES:**

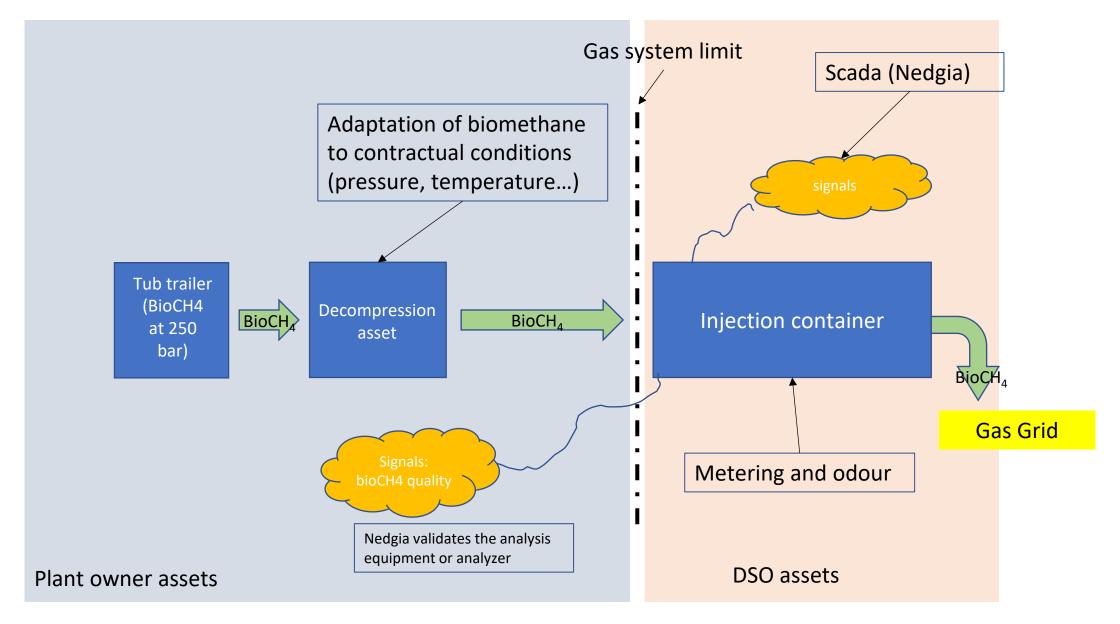
- Makes economically profitable these type of projects
- Shared injection infrastructure cost

#### **DISADVANTAGES:**

- Compressor installation is needed.
  Operational risk and cost.
- Trucks and transportation cost
- Decompression module is needed. Cost.

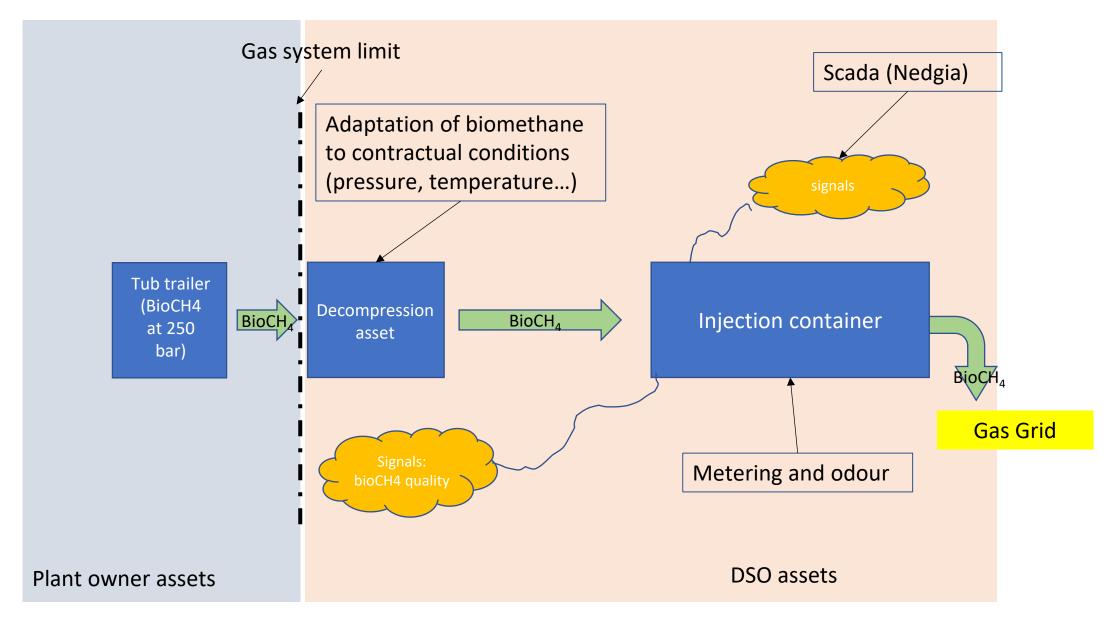
## Centralized injection points: Current asset ownership





# Centralized injection points: Proposed asset ownership (under analysis)













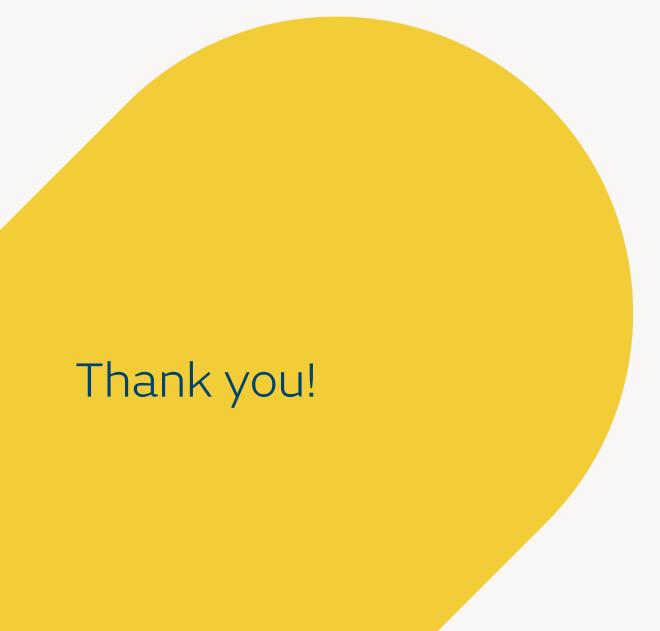














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