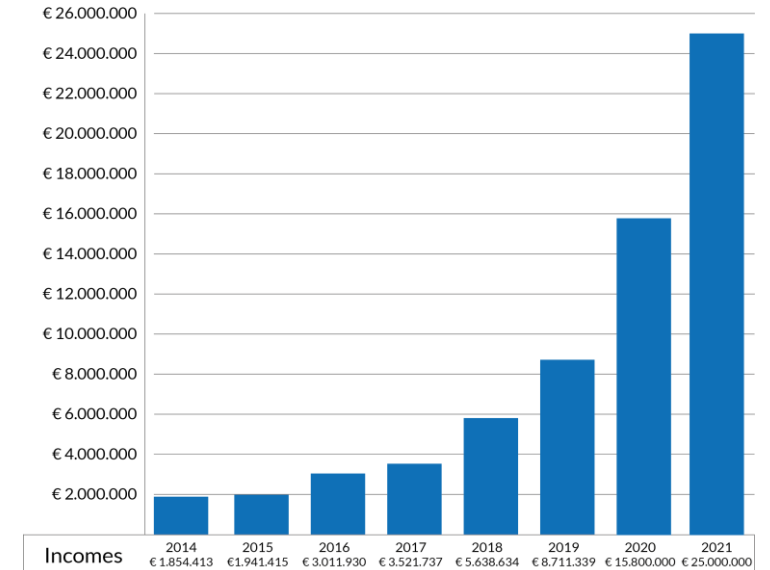


- One of the most relevant Italian Multidisciplinary Engineering and Consulting firm;
- More than 300 engineers, designers, architects, technicians and project managers;
- Driven by a common purpose: *provide top engineering services for a better and sustainable world*



Turnover 2021: 25 M€



MAIN SECTORS

- POWER & RENEWABLES
- OIL & GAS
- INDUSTRIAL
- INFRASTRUCTURES
- BUILDINGS
- ENERGY EFFICIENCY
- TELECOMMUNICATION

PROJECT LIFE-CYCLE

- FEASIBILITY
- BASIC
- FEED
- DETAIL
- OWNER
- DUE DILIGENCE
- FIELD ENGINEERING

MULTIDISCIPLINARY ENGINEERING

- CIVIL & STRUCTURAL
- MECHANICAL & PIPING
- ELECTRICAL & HVAC
- INSTRUM. & CONTROL SYSTEMS
- PROCESS TECHNOLOGIES
- FIRE FIGHTING
- ARCHITECTURAL

What energy transition means for an engineering company

Each country begins decarbonisation strategy from its legacy energy mix

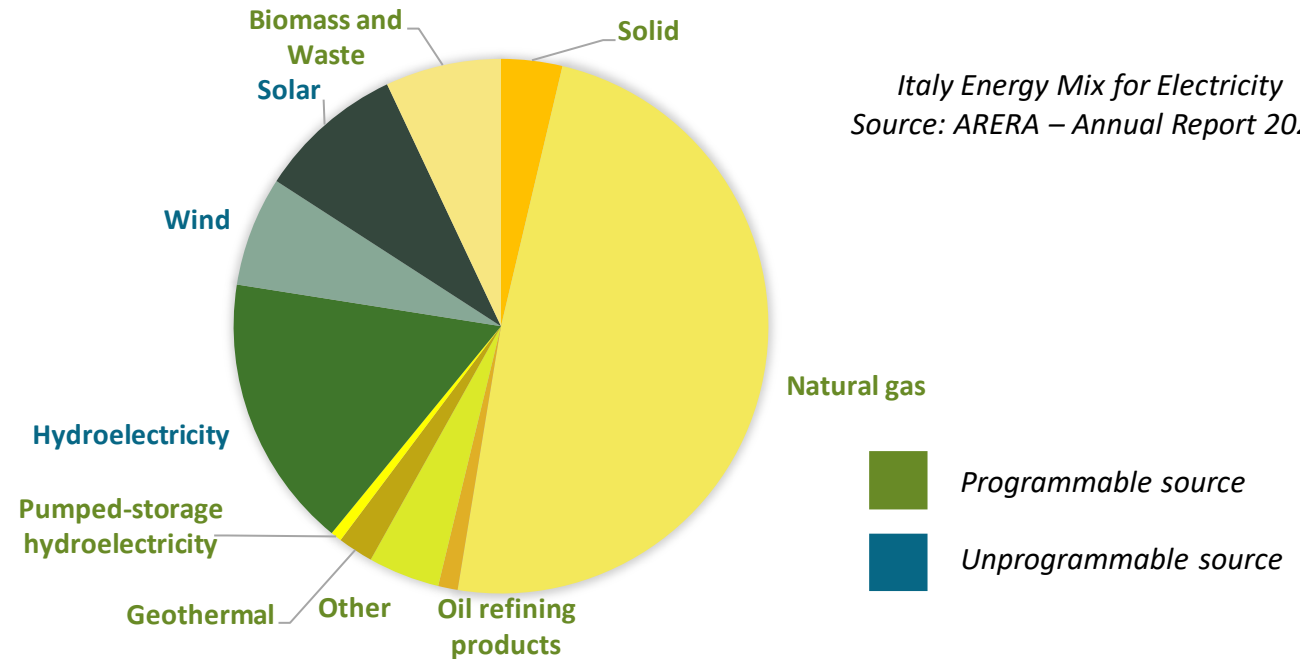
Despite the increase of renewables the majority of electricity still comes from fossil fuels

Decarbonization focuses on:



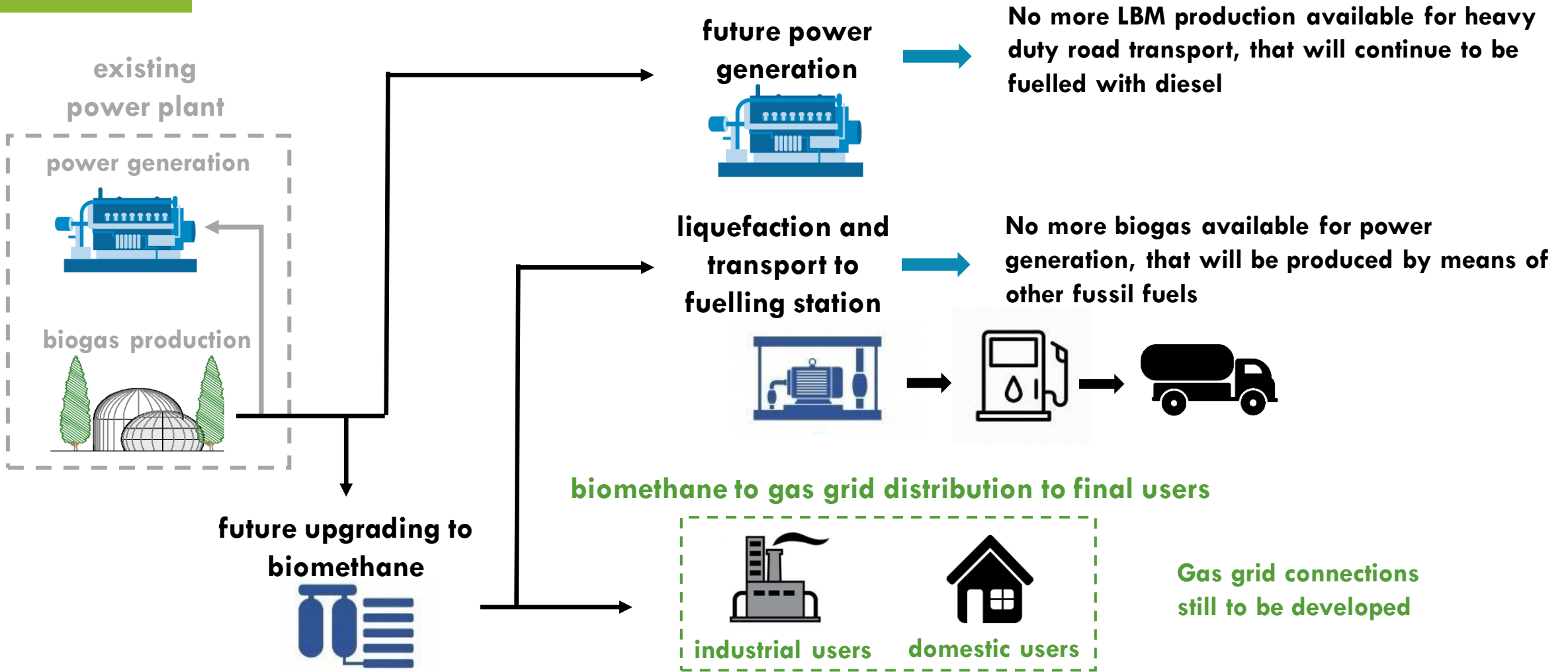
Improving the fossil fuels energy transformation

and promoting the low carbon energy fuels/renewable sources



Energy engineering companies are directly involved in the complex transition phase

Biogas transition in Italy



No comparison between the direct use of biogas/LBM because in both cases the CO₂ emission is biogenic

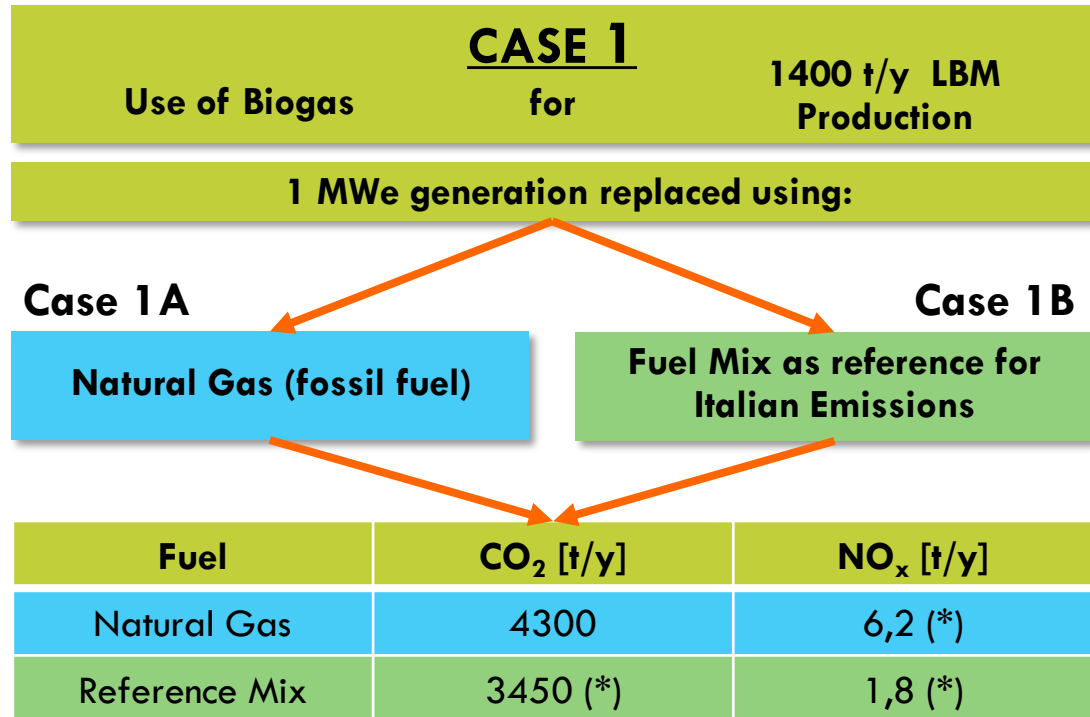
Case study

ENVIRONMENTAL FEASIBILITY STUDY

Actual Situation:

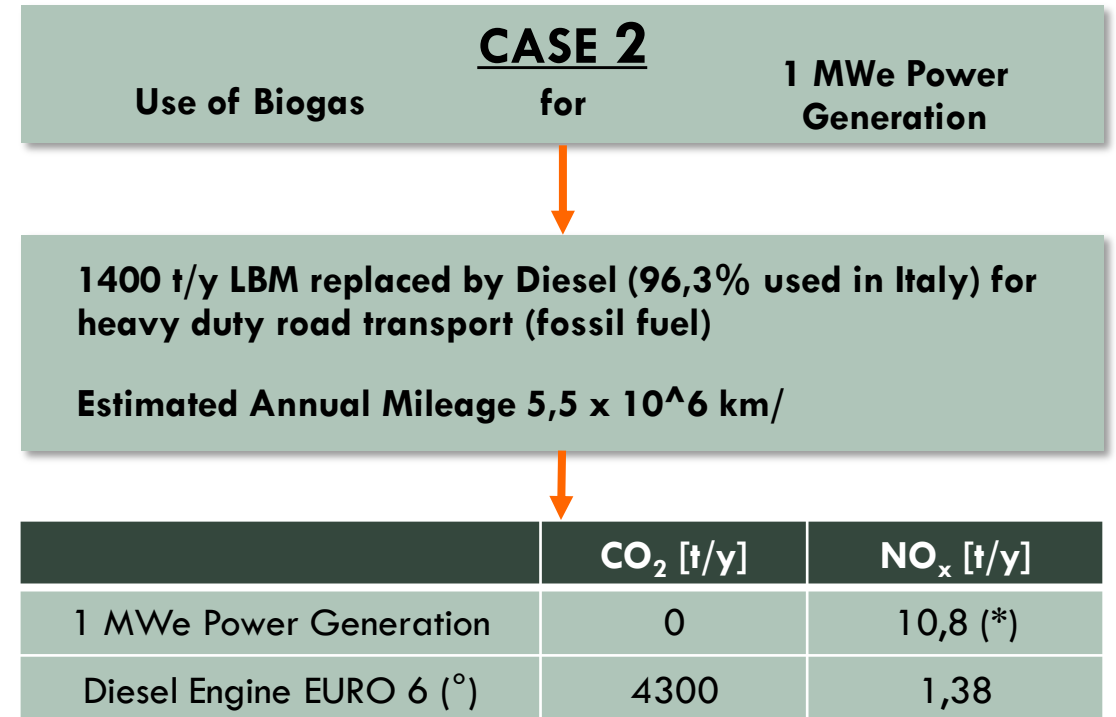
Existing 1 MWe ICE Plant fuelled by 550 kg/h dry biogas and the engine at the end of lifetime

Alternative Developments:



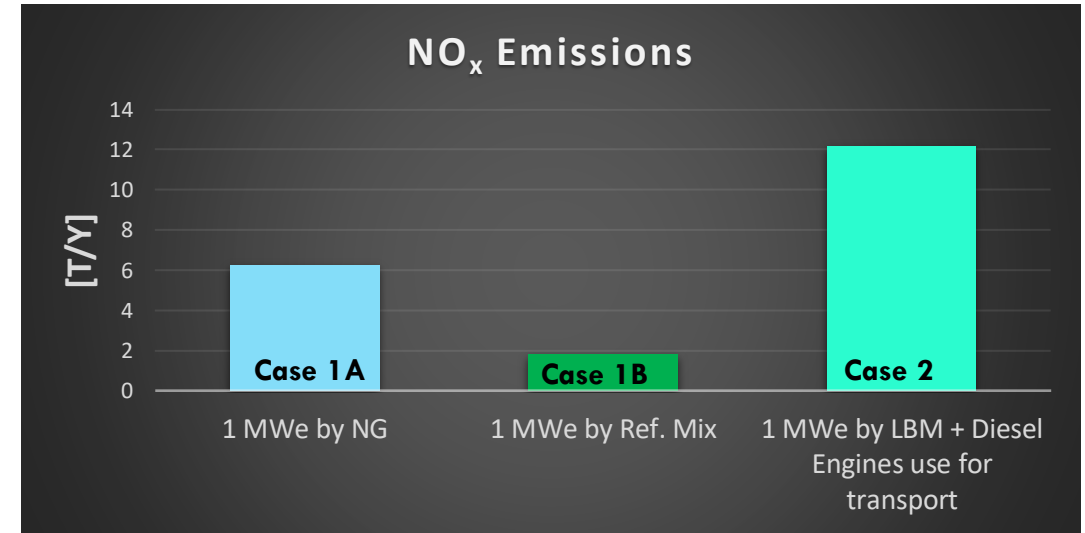
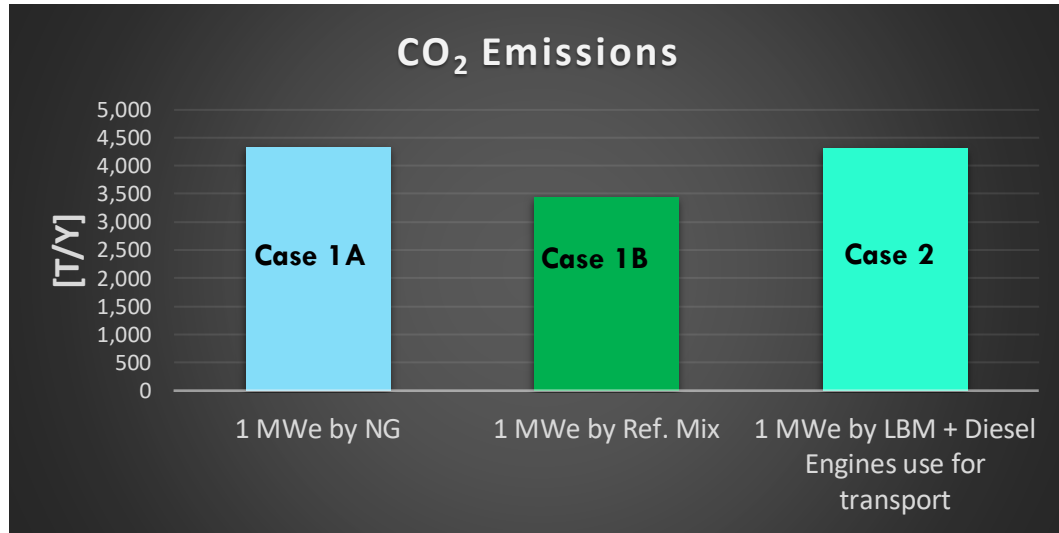
For 8300 h/y

*Based on Italian Emission Limits Regulatory Framework



°5-LH Diesel Euro 6 Heavy Duty Vehicles as reference

Case study



RESULTS:

- CO₂ Emissions are equivalent in Case 1A and Case 2
- NO_x Emissions are lower in case of NG use due to the less restrictive limits accepted by European Regulatory Framework for Biogas
- Considering the present of renewables, the use of Fuel Mix is more incentivating

The complete assessment (location, plant size, performances, economic analysis) will decide the final solution to be adopted.