

ADRIATICO₂

Marcegaglia AdriatiCO₂ Project



Funded by the European Union
Emissions Trading System
Innovation Fund

Innovation Fund NZT-2023 Projects - Project 101191172 - PIC 903201145



WE ARE INTERNATIONAL

6.5 MILLION TONNES OF FINISHED PRODUCT

7.5 BILLION EUROS IN TURNOVER

7,800 EMPLOYEES

36 PLANTS ACROSS 4 CONTINENTS

15,000 CUSTOMERS

1st PLAYER IN STEEL PROCESSING SECTOR IN THE WORLD

1st PRODUCER OF STAINLESS STEEL
WELDED TUBES IN THE WORLD

1st PRODUCER OF CARBON STEEL
WELDED TUBES IN EUROPE

1st SERVICE CENTER IN ITALY

APPLICATIONS

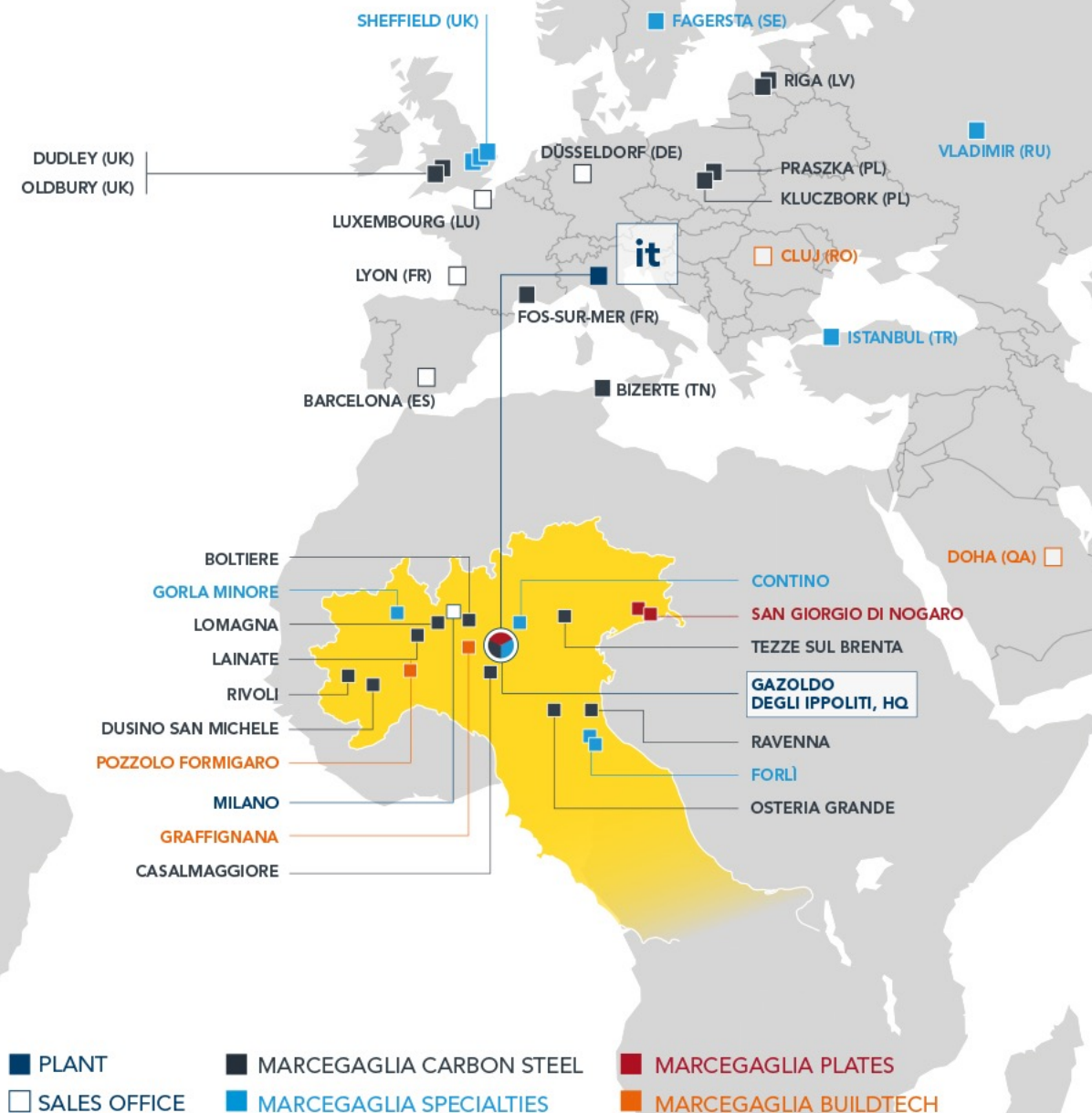
19%	BUILDING, CARPENTRY
13%	AUTOMOTIVE
9%	FOOD AND DAIRY
9%	TRADING
8%	HOUSEHOLD APPLIANCES
8%	MECHANICAL ENGINEERING
6%	AGRICULTURE
30%	OTHER (CHEMICAL, PLUMBING, FURNITURES, ENERGY)

■ RICHBURG (US)

■ QUERÉTARO (MX)

■ FUNZA (CO)

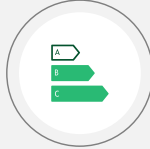
■ GARUVA (BR)





Marcegaglia is a
**decarbonization
pioneer** in the
steel processing
industry

Scheduled actions for CO₂ reduction by 2030



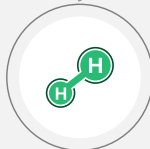
Energy saving and process innovation (SCOPE 1)

- Energy efficiency projects
- Electrification of thermal plants



Renewable energy (SCOPE 2)

- Production and supply of green energy



Alternative energy sources (SCOPE 1)

- Feasibility study of using green hydrogen in static annealing/hot dip galvanizing



Raw material supply (SCOPE 3)

- H2 Green Steel (H2GS): innovative steel plant to produce green steel
- Incentive to purchase from virtuous suppliers
- Off-take agreements beyond H2GS



Capture of CO₂ emissions (SCOPE 1 and 2)

- Carbon Capture Utilization and Storage (CCS) project in the Ravenna facility

AdriatiCO₂ project embraces holistic decarbonization by leveraging 3 innovative solutions with relevant synergies embedded, within a broader transition strategy undertaken by Marcegaglia group

A



CCUS on Co-Generator and Green DRI² Plant



Installation of a CCS plant with Amine-based technology to capture CO₂ emissions from Co-generator plant and Biogenic CO₂ emissions from DRI plant

B



Green DRI (I-Smelt) Production



Production of carbon neutral DRI through reduction of ferrous oxides, biochar & starch

C



Bio Energy Carbon Capture and Storage (BECCS)



Utilization of biomethane as input in Co-Gen plant as partial replacement of methane

AdriatiCO₂ is a pivotal project across 3 key dimensions



1 Environmental, Social & Economic Impact



CCUS allowing to capture large volume of CO₂ (up to 112 kt of CO₂ captured per year, cutting more than 40% of Marcegaglia Ravenna Scope 1 emissions)



Project delivering social and economic benefits for national economy



2 Exceptional degree of innovation



BECCS¹ not yet developed in Italy and Southern Europe



Capture of biogenic CO₂ flowrates leading to net negative emissions



3 Optimal logistics integrated solution



T&S² infrastructure present in the plant's immediate vicinity



Eni and Snam collaborating for pipeline and wells management



AdriatiCO₂ will be a pioneer in BECCS deployment in Italy & Southern Europe, reducing net CO₂ released in atmosphere

AdriatiCO₂ will leverage BECCS with a twofold strategy



ADRIATICO₂



Partial replacement of
co-generator consumption
with biomethane

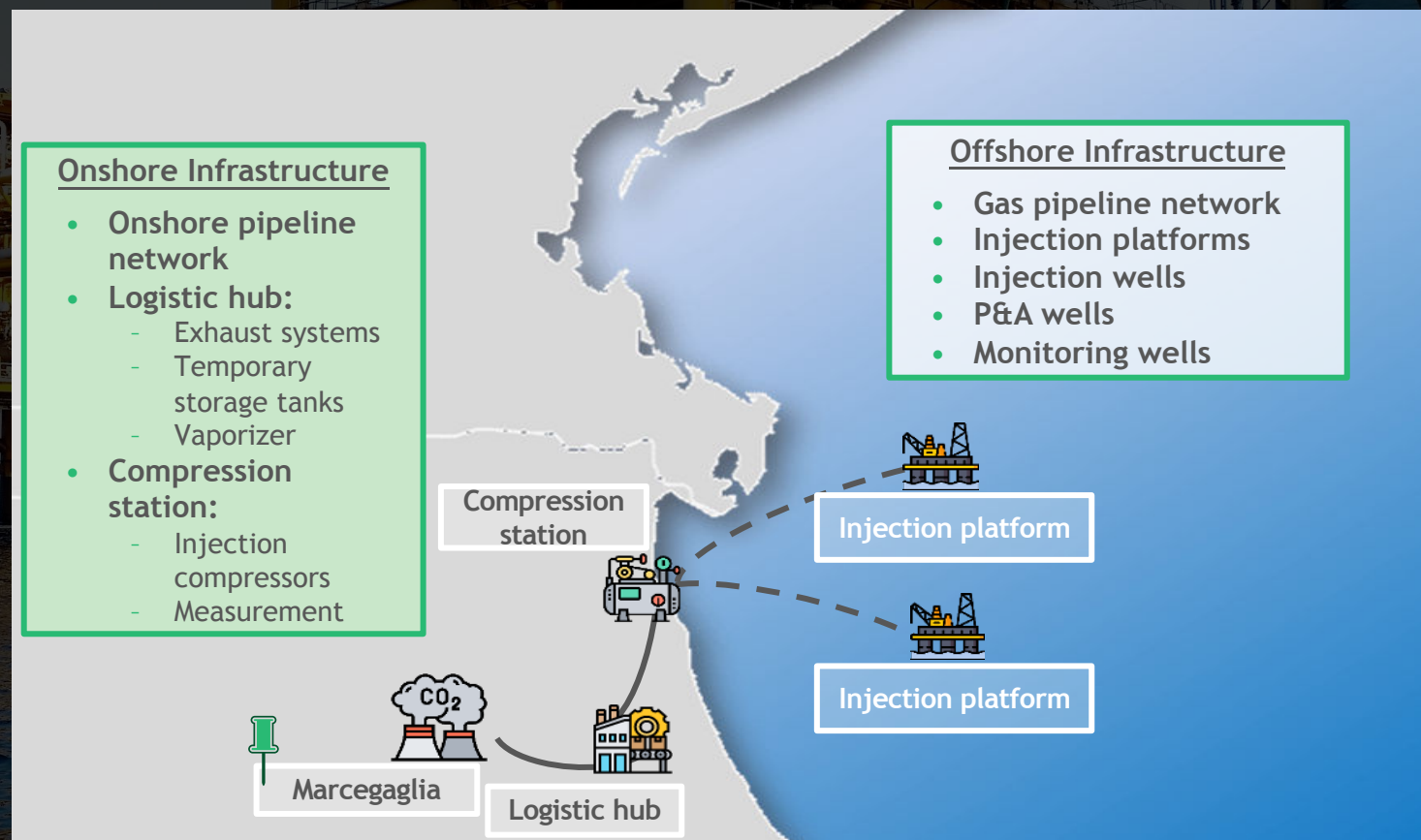
Utilization of biochar
to fuel the new Green
DRI plant operations

The project is a pivotal
step for Marcegaglia's
goal to attain a
**negative carbon
footprint across the
entire Ravenna facility**
in the future



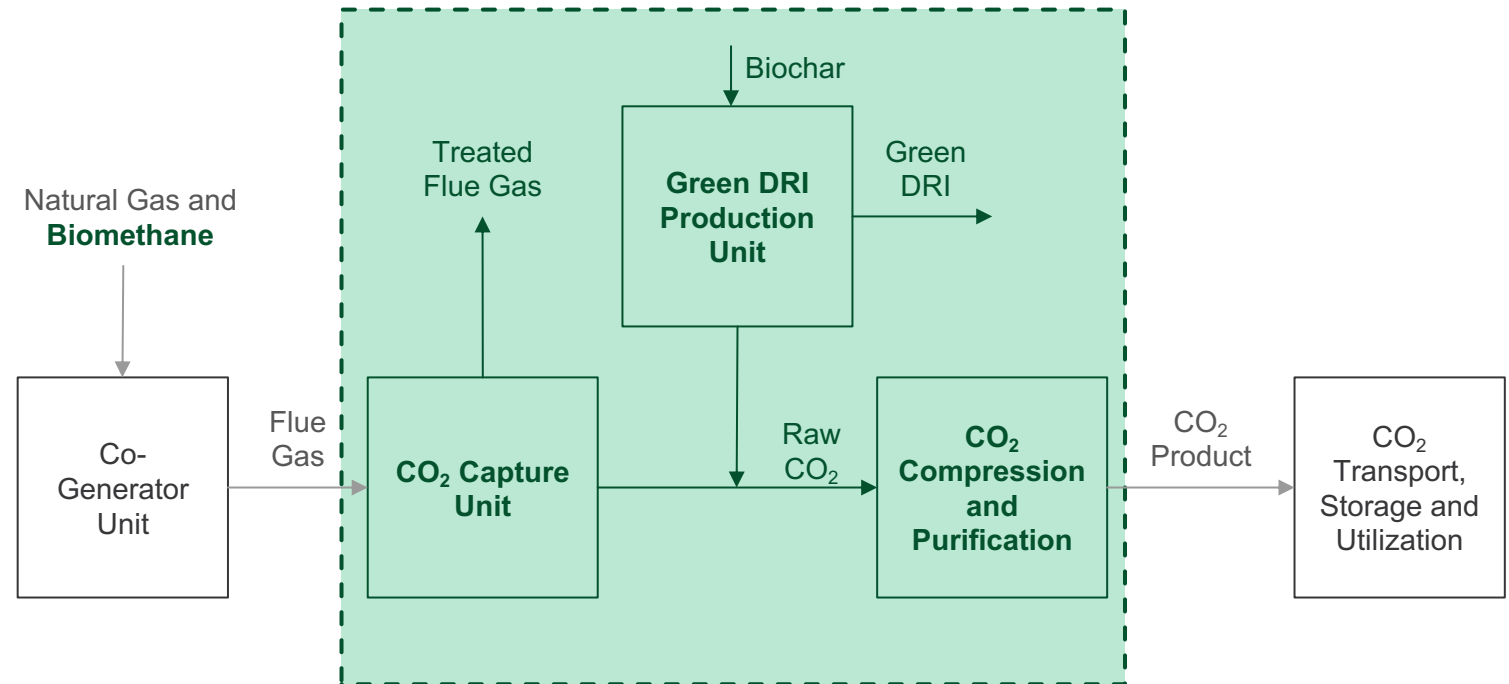
AdriatiCO₂ will benefit from infrastructural synergies given proximity to primary CO₂ compression and storage sites

- Transport, liquefaction, and storage infrastructure in the vicinity of Marcegaglia plant
- Facilities managed by ENI and SNAM



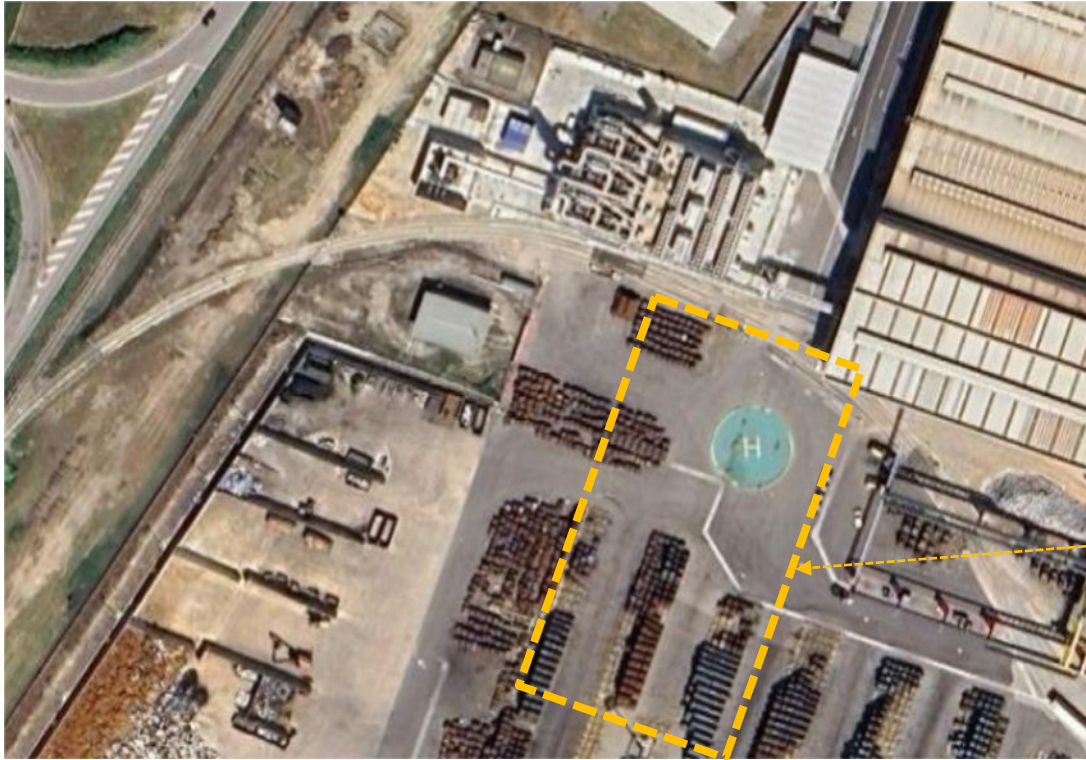
AdriatiCO₂

Schematic view of the technical project



IF Grant Application Perimeter

Location of CC unit and Green-DRI plant in Ravenna facility



ADRIATICO₂



Funded by the European Union
Emissions Trading System
Innovation Fund



MARCEGAGLIA