



# Low-Carbon credentials

recycled from the waste of food industr

SOCIAL AND ENVIRONMENTAL INITIATIVE  
by Oskelen's production chain suppliers for the pirarucu bag

PROJECTS 5

PEOPLE 184

SOCIAL AND ENVIRONMENTAL NETWORK

MAIN SOCIAL INITIATIVES

- education
- environmental
- life quality partnerships

PRODUCTION ACTIVITIES

Ilha de Marajó, PA

Belém, PA

BRAZIL

Franca, SP

Três Rios, RJ

Rio de Janeiro, RJ

OSKLEN

ecosostenibile.eu





# Exploiting the new sustainability wave

- **Brand building** increase in market shares from the environmental segment, consolidation of the customer experience, greater attractiveness of communication (spot [SanBenedetto Carbon Neutral](#));
- **Comunicazione** 66,3% of customers say they would understand the characteristics of Green products better if they were communicated with comparative advertising vs no green; [#good4Ugood4theEarth](#)
- **Marketing** increase propensity to consume vs green companies, today consumers willing to pay a price premium (value between 20 > 25%) have gone from 17% to 51% (**Nielsen, Eumetra**);
- **Reputation** 47.5% of companies see green as a strategic investment;
- **Rating higher** in public tenders D.LGS 50/16 Nuovo Codice Appalti, national **Compliance** and **UE** (Non Financial Disclosure, **Green New Deal, Circular Economy Action Plan, Taxonomy, Corporate Sustainability Report**);
- Investors around the world are increasingly convinced that integrated ESG portfolios can mitigate risk and increase returns, in fact 75% incorporate the same principles in their investment process;
- **Financing** from **Next Generation EU** in the National Recovery and Resilience Plan (green revolution and ecological transition € 68.9 billion, sustainable mobility €31,9 Mld);
- **EU-ETS** sectors subject to cap & trade that must keep under control the CO<sub>2</sub> market value, which has recently skyrocketed (+450% from March 20, € 89.45 /tCO<sub>2</sub> in December 2022);
- **Saving** reducing CO<sub>2</sub> emissions also reduces energy consumption (and therefore costs) becoming more efficient (mobility, lighting, cooling / heating, kW power used).

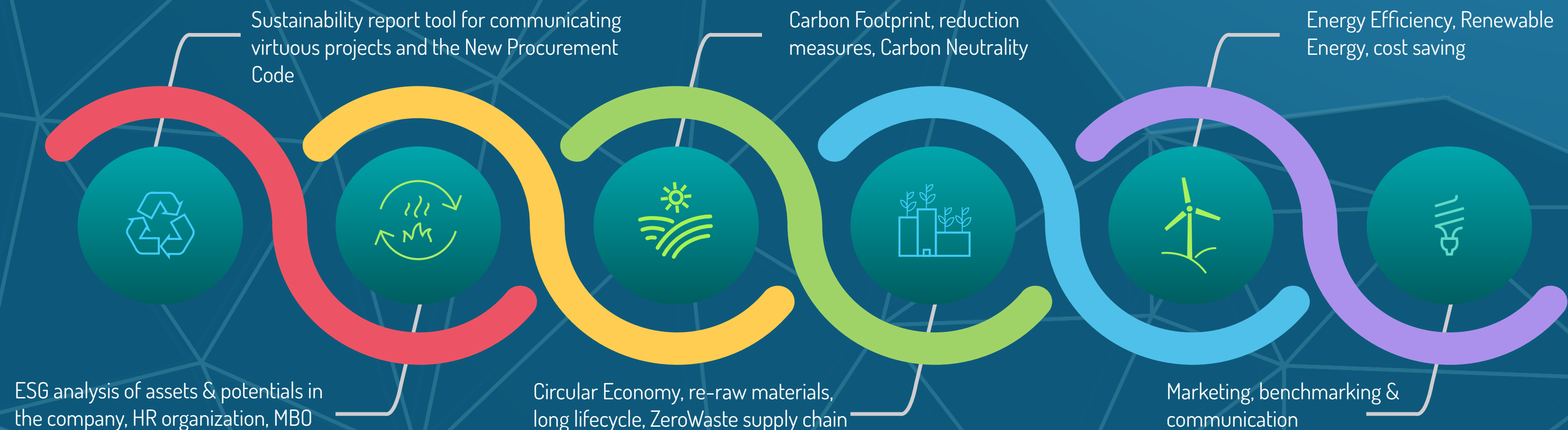
# Disruptive Sustainability

- We help companies in their path towards sustainability starting from the #greenstrategy, with the same standards as big4 but at significantly lower costs;
- Asset & potentials of the management procedures and ESG processes by acquiring the necessary knowledge of the critical aspects, the level of commitment of the company management both from the point of view of compliance and with respect to international standards and best practices;
- Project analysis, completely custom proprietary methodologies:
  - Sustainability Report (DL 254/2016), EU Taxonomy and Corporate Sustainability Reporting Directive 2022;
  - Carbon Management (certifications ISO 140XXX), CO<sub>2</sub> reduction, offsetting, CO<sub>2</sub> neutrality;
  - Models of Circular Economy (product as service, long-lifecycle, ZeroWaste);
  - Energy Efficiency & renewables;
  - EU Emission Trading System (advisory & reporting);
  - Brand building & marketing [Go-live CO<sub>2</sub> counter](#), [Lifecycle movie](#) as a tool to communicate sustainability projects implemented and certified by third parties (AGCOM compliance);
  - **E-CO<sub>2</sub>** integrated low-carbon platform that will allow you to digitize proprietary methodologies by fulfilling compliance in SaaS mode, through scalable modules starting from the Sustainability Report, ISO14000 certifications, circular economy and ETS.



# Insight

- BCG, Eumetra** report 2019 “CEOs engaged in sustainability (20%) are driving companies to address these reporting to Board, investors and stakeholders... Consumers are willing to pay a price premium 20% and abandon their favorite brands safeguarding ”good for me and for the world”
- JP Morgan Chase, BlackRock** CEO letter 2019-20 “...place sustainability at the center of our investment approach, including: making sustainability integral to portfolio construction and risk management. we will be increasingly disposed to vote against management and board directors when companies are not making sufficient progress on sustainability-related disclosures and the business practices and plans underlying them”
- Luca DalFabbro, Barenberg Bank** forecast Dic2019 “European carbon prices could average €65/CO<sub>2</sub>t in 2021, though sink back to €50/CO<sub>2</sub>t from 2022-25, as the market was likely to remain short over the next decade”
- RBC Global Asset Management** 75% of institutional investors incorporate ESG principles into their investment process, up from 70% in 2019

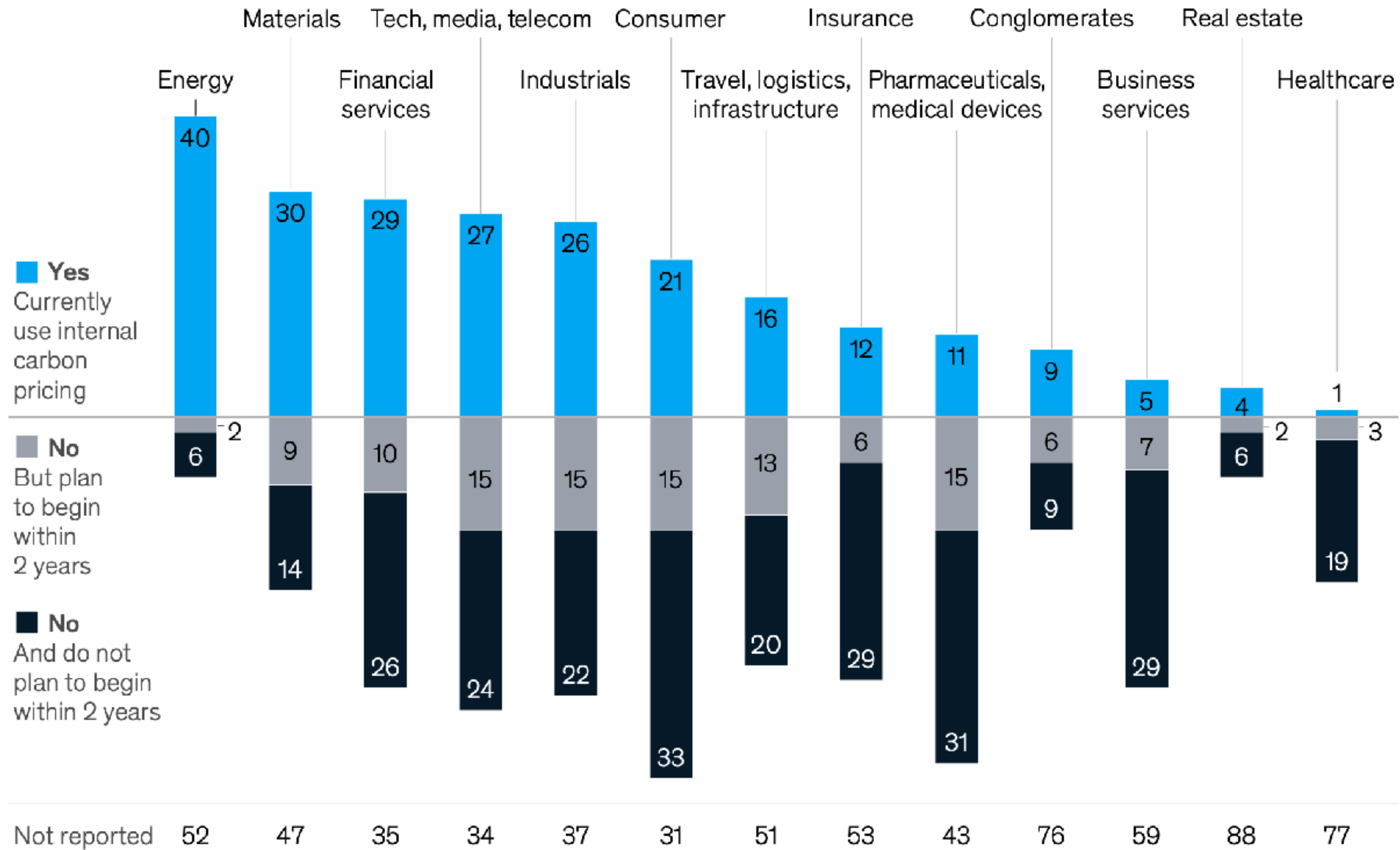




# CO<sub>2</sub> industries

**Internal carbon pricing is most prevalent in energy, materials, and financial-services industries.**

**Use of carbon pricing by industry sector,<sup>1</sup> %**



06 EVA 78 MANIFATTURA AGRICOLTURA

activity gender mean age yrs

63/47% 40

0% manual

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eCO<sub>2</sub><sup>®</sup> is the unique modular and scalable ESG platform which allows to internalize ESG processes instead of outsourcing them but above all to avoid annual data-entry, automating the collection of information already contained into the company ERP through APIs; each module is equipped with dynamic dashboards completely custom (IE SGR), that guarantee constant plan & control related to the KPIs defined by the user, measuring the whole ESG company impact and certifiable reporting:

- **Governance**, strategy overview (ESG performance, simulations what-if/scenario, benchmarks, MBO)
- **Sustainability Disclosure** (Taxonomy compliance), materiality matrix, social, SDG, report GRI/SASB;
- **Carbon Footprint**, ISO, offsetting, Carbon Emission Factor D-Base, Science Based Target;
- **Circular Economy**, Long Life-Cycle Assessment, product as service, re-raw materials, renewable energy;
- **EU Emission Trading System** compliance, risk assessment (€85,51/tCO<sub>2</sub> Dic21, +430% since Mar20);
- Each module is equipped by features as **Blockchain** for energy efficiency projects, **Artificial Intelligence & IoT** predictive models for consumption/saving and Value Added Services ([lifecycle movie](#), [Go-live CO<sub>2</sub> counter](#)).

From the international benchmarking eCO<sub>2</sub><sup>®</sup> results the only ESG PaaS modular and scalable which realize **misurable** templates and report (no assessment), **certifiable** (by third entity), **comparable** with supply chain and competitor.

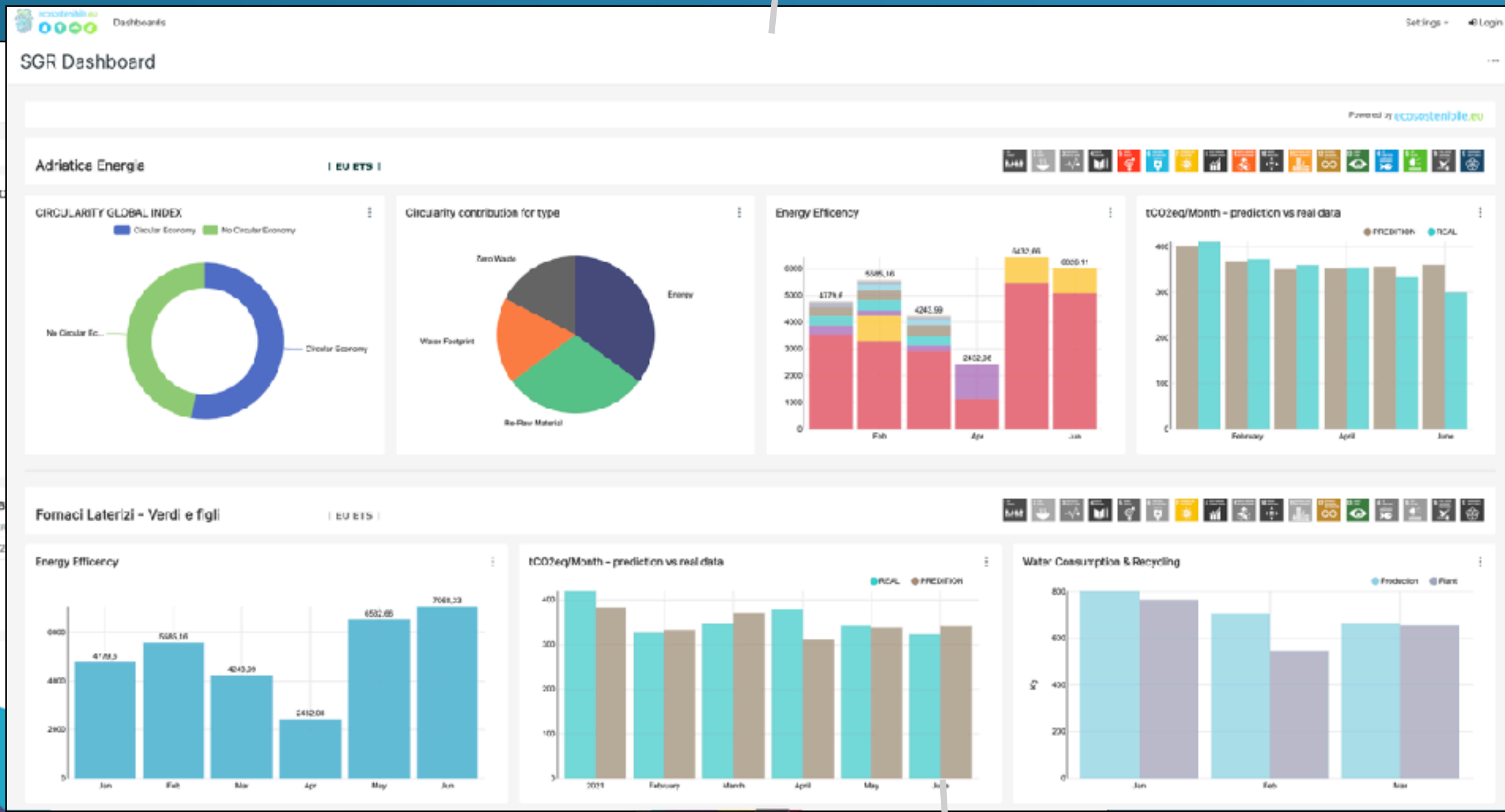
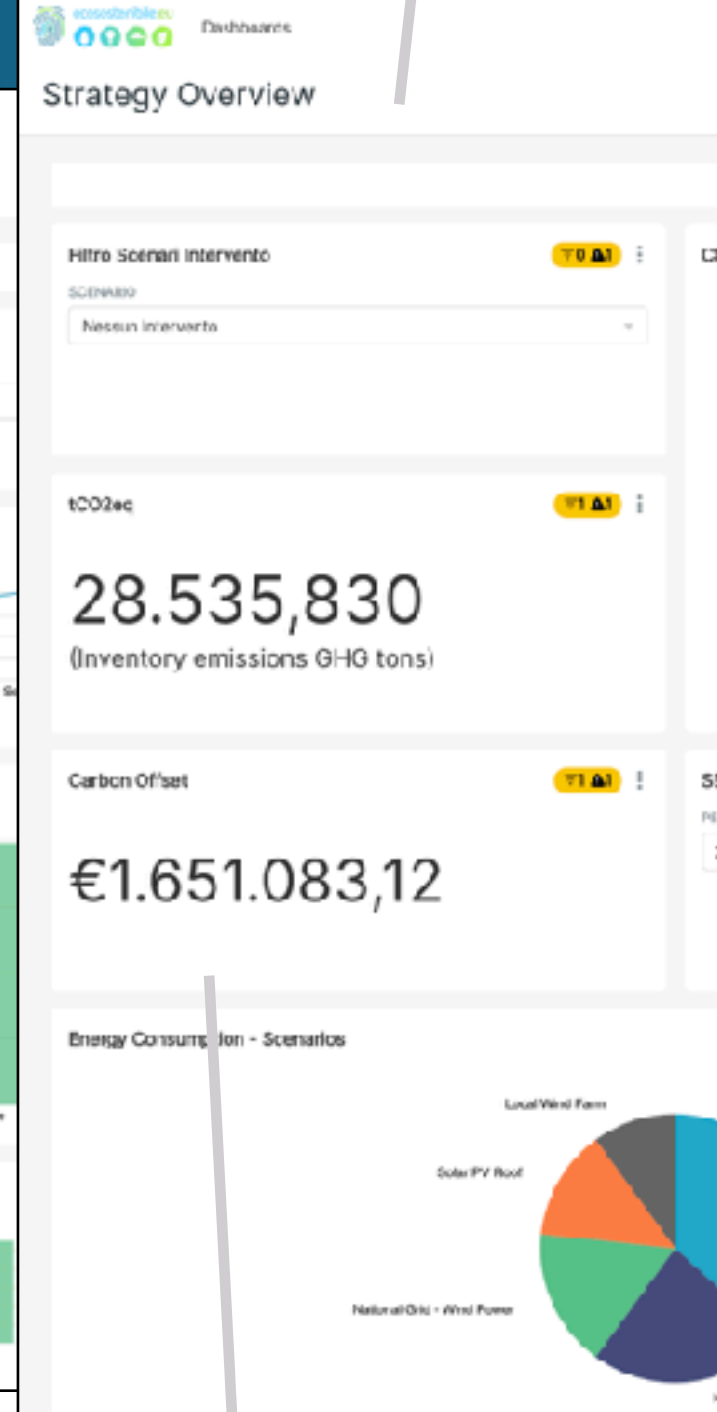
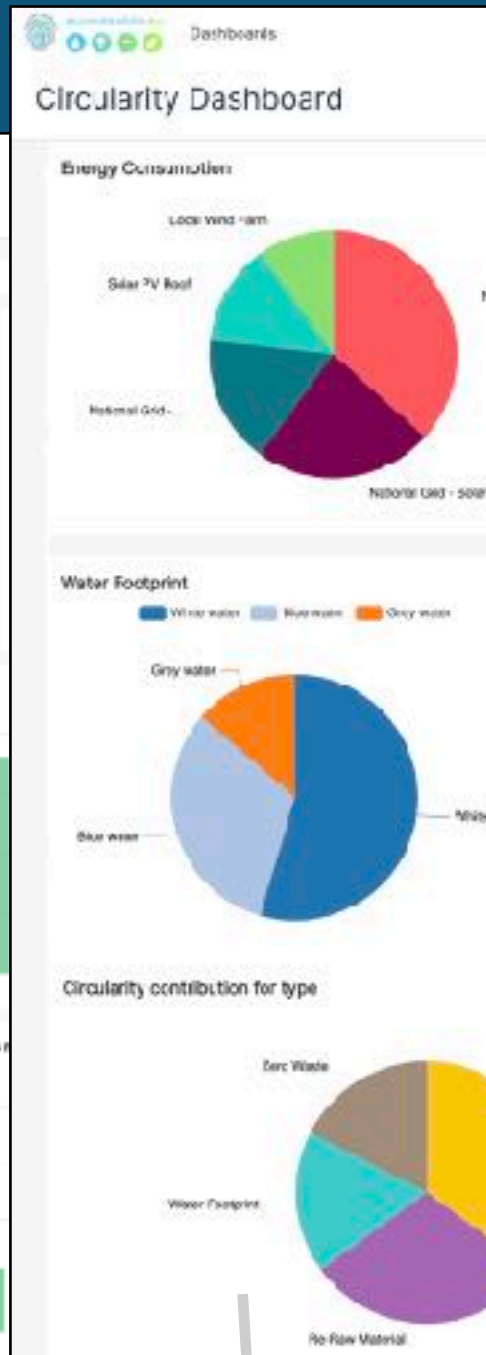
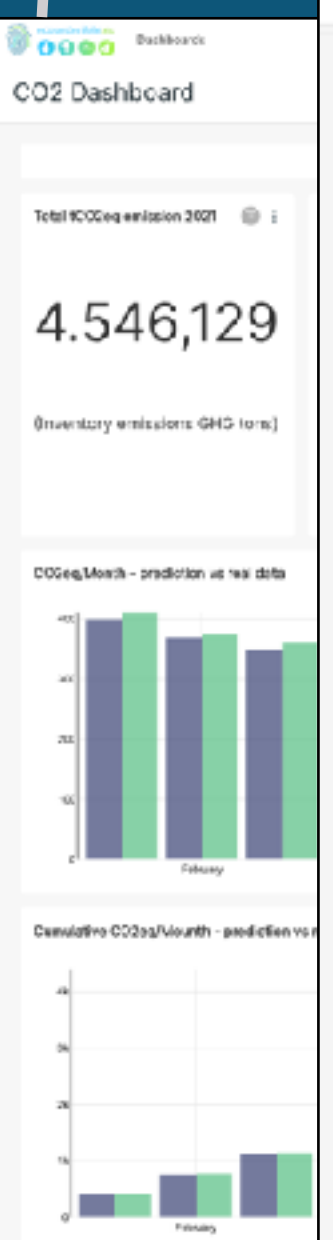
Sustainability disclosure

ETS dashboard

Governance scenario simulation

SGR ESG portfolio

CO<sub>2</sub> dashboard



Circularity dashboard

Offsetting financials

APPs



SBTi, 2030 Transition risk

To report what is relevant for stakeholders and business in accordance with the GRI standard framework, Companies need to identify and consider what's significant so eCO<sub>2</sub>® SaaS realize automatically reporting, the powerful way to prioritize sustainability work. Select a set of the most significant ESG KPI from the prioritized list



# eCO<sub>2</sub> App

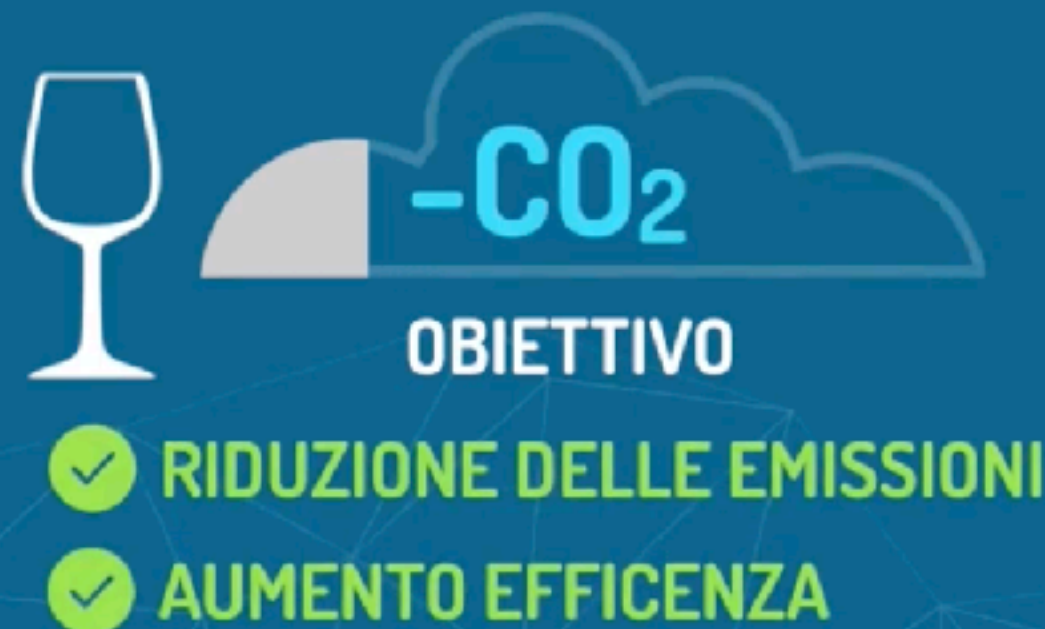


A tool for the consumer to verify the environmental performance of ecobuilding and/or its POS

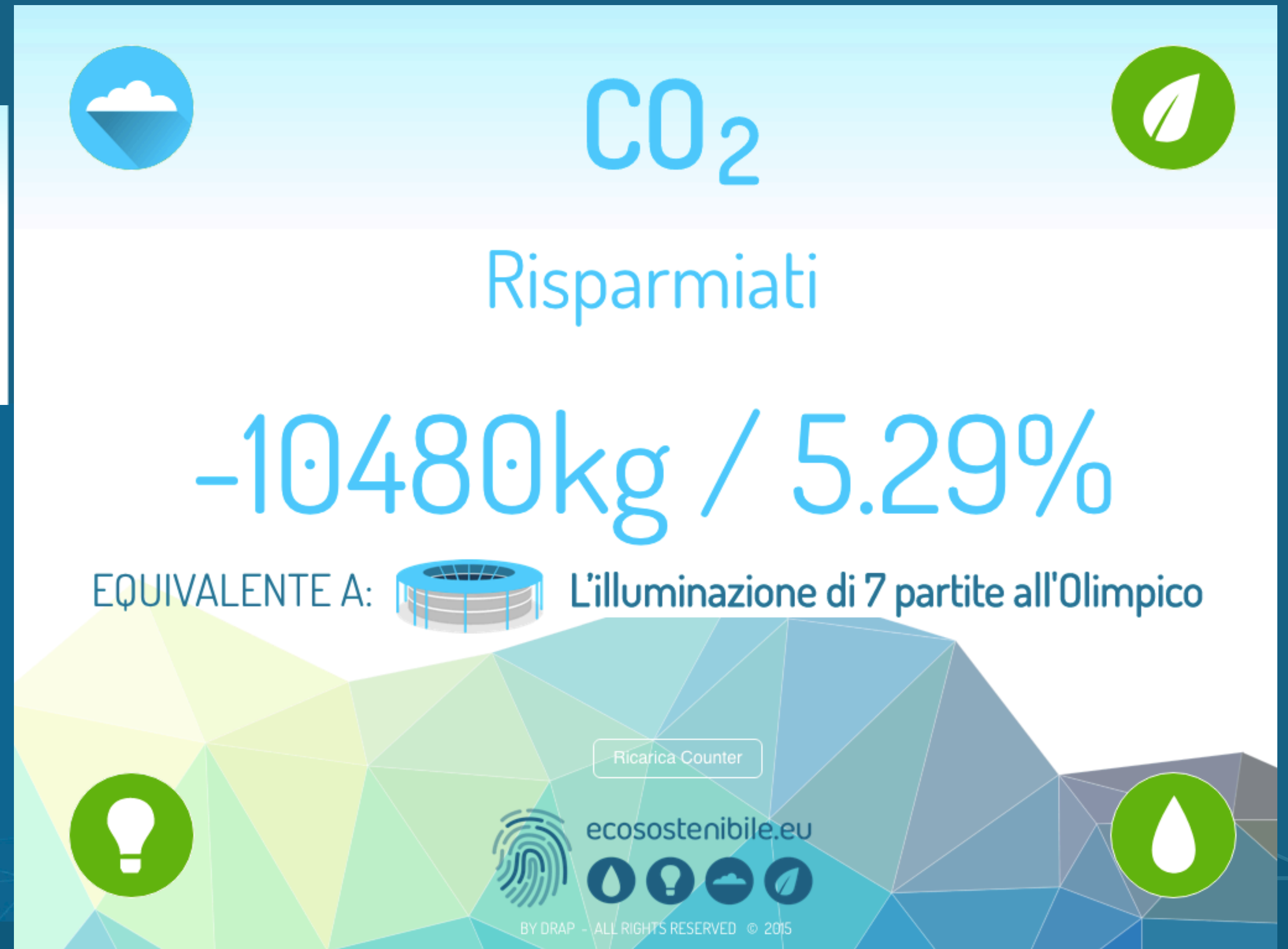




## LIFECYCLE TOTALE EMISSIONI



[Lifecycle movie](#) to communicate sustainability projects implemented



[Go-live CO<sub>2</sub> counter](#) monitors in every moment and on every device (smartphone, big screen) the CO<sub>2</sub> savings in the environment



# Social Footprint

- The objective of the Social Footprint is to involve the consumer in more aware purchasing choices and to communicate to stakeholders in a transparent way the ethical and social commitment, the location of the entire supply chain and the people involved in the process of making the product from the source, contributing to compliance (Non Financial Disclosure - D.LGS 254/2016).
- The "history" of the product, its craftsmanship define the social impact of the product and is measured through a series of indicators selected by the stakeholders (turnover, number of employees, education rate, production and procurement process, mapping of the production cycle, products with good environmental practices, natural and / or recycled materials, with low CO<sub>2</sub> content). The projects concluded and monitored following the social footprint assessment have successfully demonstrated that:
  - Information on the social aspects of a product is of interest to the consumer;
  - It is possible to use social indicators connected specifically to the territory and the country of production;
  - Companies have the opportunity to communicate their virtuous projects "if it doesn't arrive it doesn't exist".
- The Social Footprint theme is integrated into Corporate Responsibility activities for the accuracy of the information provided to the market, both through product labels and through advertising and additional information on the web.



# “Made in” Strategy

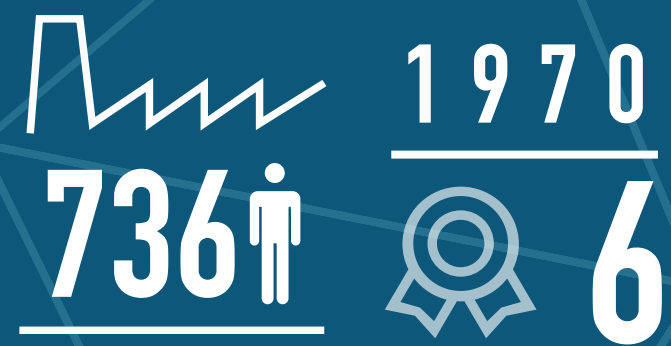
**Identity** for each product / company, different metrics are indicated to identify the size of the organization, demographic elements of the people involved and the type of activity and process starting from raw materials to the finished product.

**Social** people / organizations working around a product can organize social projects for the benefit of the local population or the environment. These metrics allow to give a dimension to the projects developed and a social certification is also indicated.

## SOCIAL CERTIFICATION

### Identity and #projects

No. of employees, year of establishment and completed projects



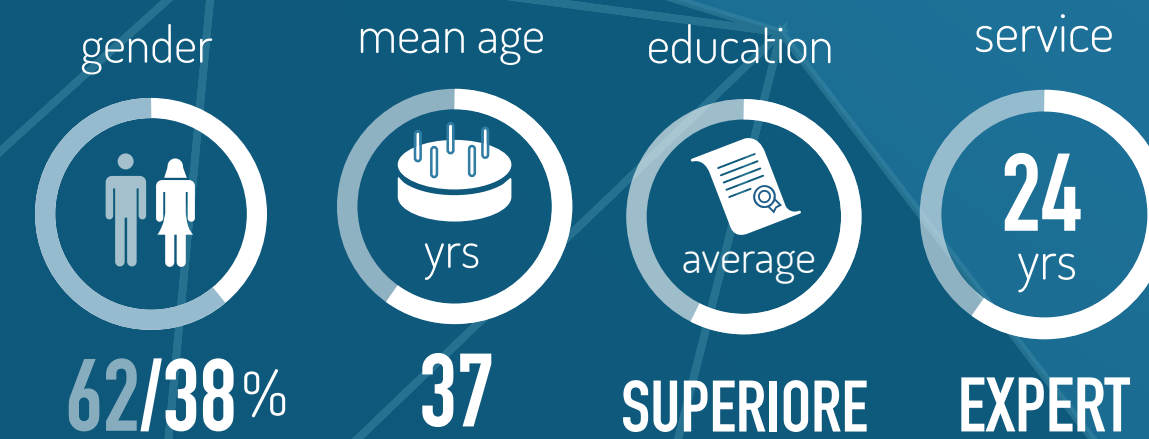
### Activities

The activity carried out in the analyzed point



### Employees

Gender, average age, level of education and length of service



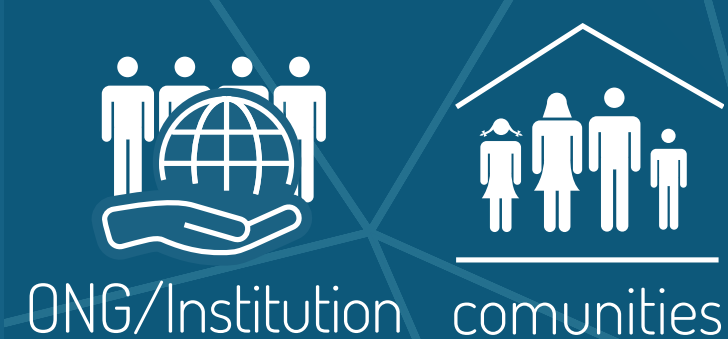
### Social Initiatives

The type of social initiatives organized



### Social Environmental Network

Impact on local unemployment of the activities involved



### Process

Level of mechanization / automation of the process



### Data Accuracy



Given the vastness of the data sources necessary for this analysis, a data accuracy index linked to a project / product data or single metric is indicated

### People Involved

How many people are involved in the projects?





# Low-Carbon Culture Dissemination

EMISSION

COUNTER

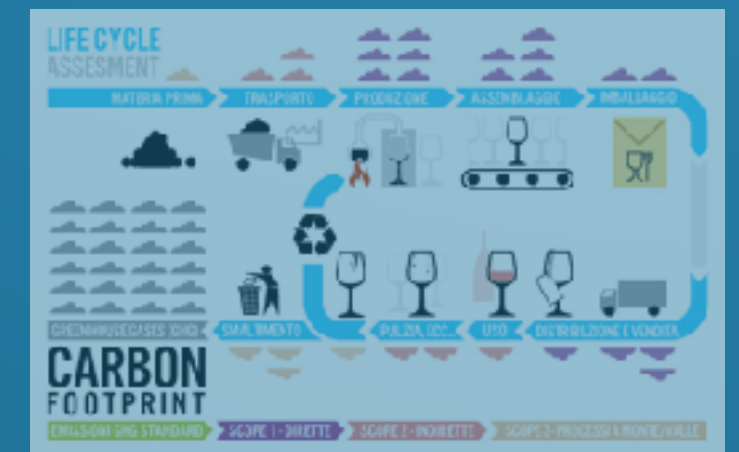
Design and development of tools that enhance the sustainability of the product and expand the marketing & communication levers such as the Go-live CO2 counter which accounts live the GHG emissions saved during the activity and communicates it in the company, in-store proms, events and on any device



INFO PANEL

COMMUNICATION

Realization of life-cycle movies, info panels and surveys dedicated to sustainability in the company and the related communication of the commitment; #socialfootprint the history of the company, the supply chain, the education rate, the pink quotas, the products with good environmental practices, natural and/or recycled materials, with a low CO<sub>2</sub> content



SURVEY & INCENTIVE

A real competition between divisions by internally evaluating CO<sub>2</sub> consumption habits and behavior; We encourage and help our partners to apply for reputation enhancing Sustainability Awards based on a carbon emissions calculator. Awards are also a great way to say 'thank-you' to your staff and recognize the sustainable engagement making business

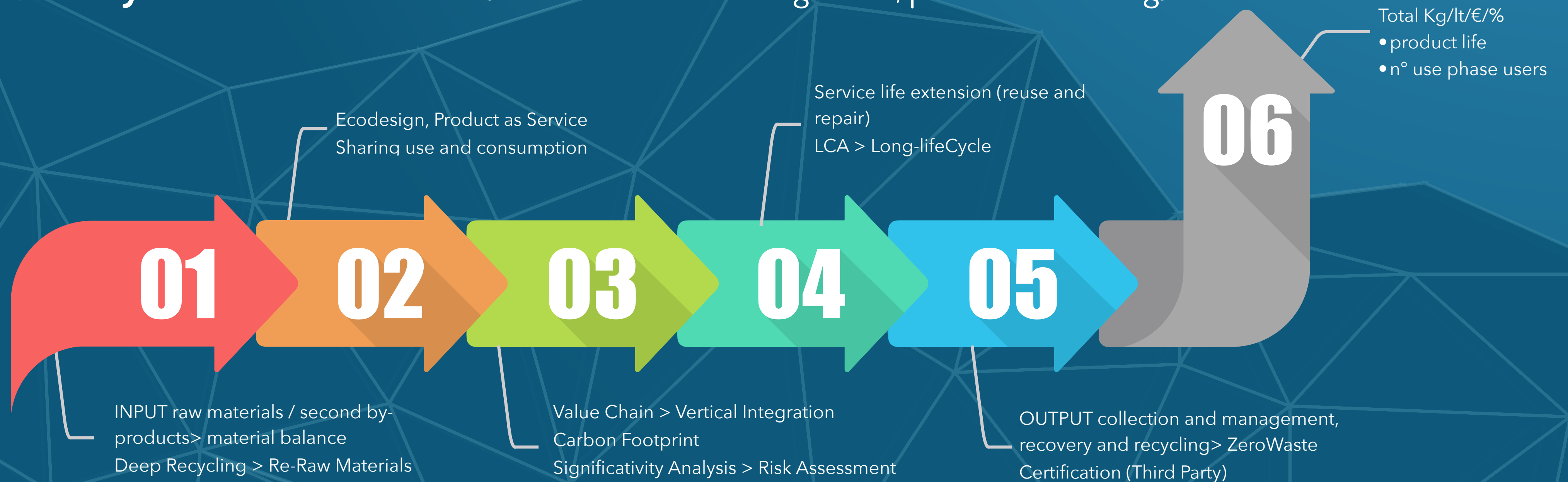
Abitudini di Consumo CO<sub>2</sub>

Quantità 1	Quantità 2
1. Fumate sigarette	2. Consumate il...
2. Fumate sigarette	3. Fumate...
3. Fumate il sigarette	4. Non usate...
4. Fumate il sigarette	5. Non usate...
5. Fumate il sigarette	6. Non usate...



# Circular Economy

- That the Circular Economy is "recycling waste" is a wrong idea, it is a much broader concept that starts from design and extends the useful life), from LCA to Long-LifeCycle (repairability, disassembly, durability guarantee, with work and service management criteria (Product as Service) and finally, the content of recovery and recycling of products (Deep Recycling> Re-Raw Materials> renewable energy> ZeroWaste); moving towards a circular economy, the apparel sector can achieve a economic opportunity that is worth 43% of the value it generates every year;
- **ESG** the challenges and the role that sustainable finance poses is to invest in tools with the intention of generating a financial return considering a positive, concrete and measurable environmental and social impact; investing according to ESG criteria means building a customer portfolio by evaluating companies and countries with respect to their degree of compliance with sustainability, measuring environmental, social and governance factors;
- **Carbon Neutrality** does not exist in nature (animals> anaerobic digesters, plants > offsetting).





# Project Proposal

ecosostenibile.eu® analyses As-Is, Due Diligence and process development ESG

Green Strategy, positioning SDGs

Carbon Footprint, Energy Efficiency, reduction CO<sub>2</sub>, carbon neutrality

Circular Economy, ZeroWaste, maintenance & re-raw materials, company circularity index

Saving of costs up to 50%

Communication (Go-live CO<sub>2</sub> counter, event, spot TV, Lifecycle movie) and Low-CO<sub>2</sub> culture dissemination

eCO<sub>2</sub>® platform ESG integrated with ERP through APIs



RE-RAW MATERIALS



ENERGY EFFICIENCY



LOGISTICS & TRANSPORT



DIGITAL INTEGRATION



FUEL SWITCHING



CO<sub>2</sub> REDUCTION



OFFSETTING



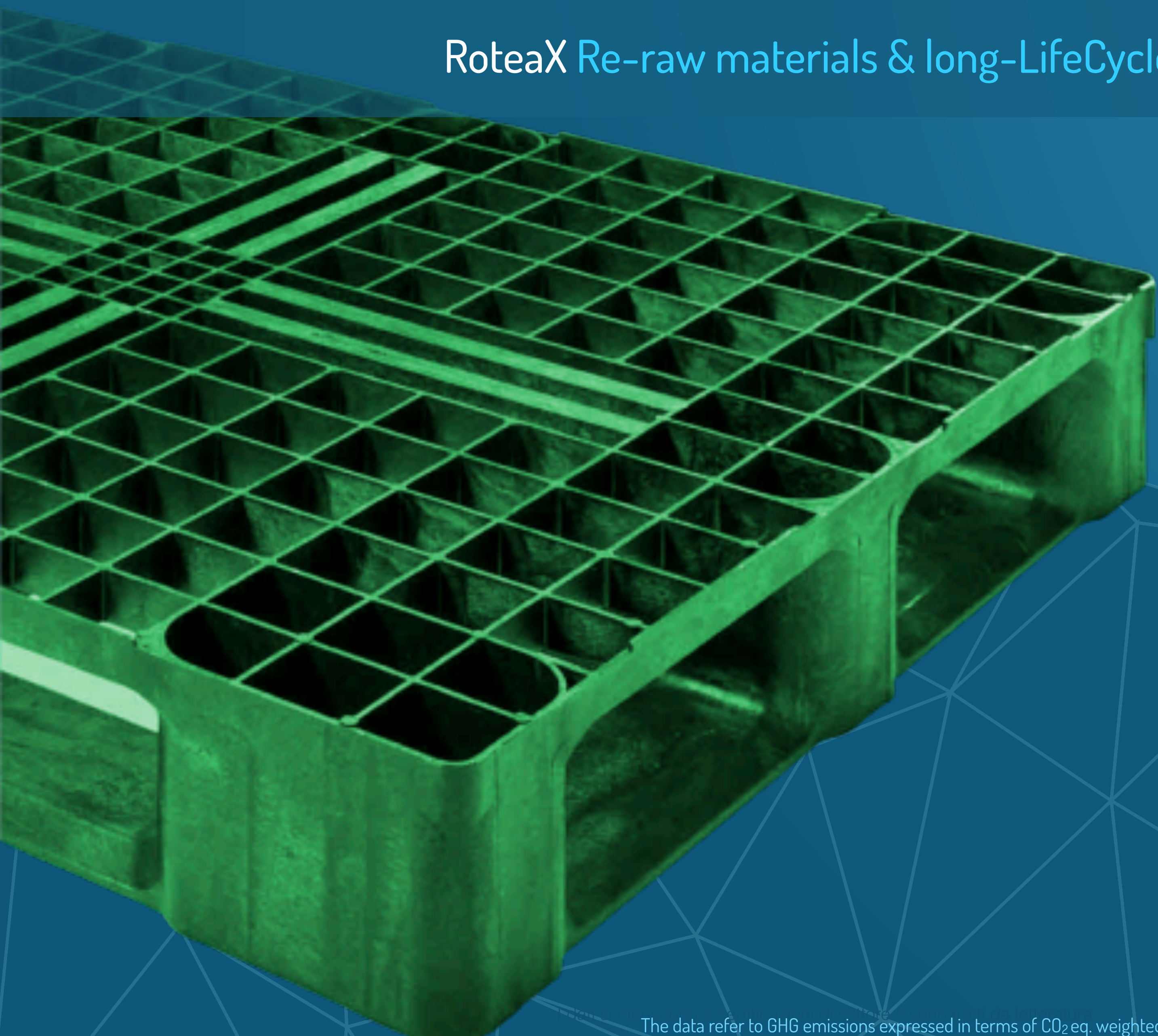
SAVING

eCO<sub>2</sub>® supports the creation of a sustainable competitive advantage by digitally integrating CarbonFootprint with Circular Economy, defining the 1st methodology of the sector in EU, certifiable by a third party, comparable with competitors



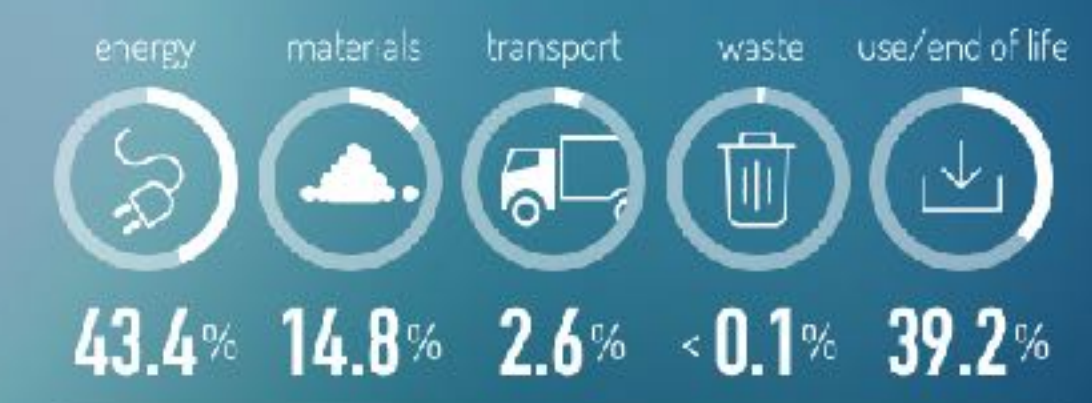
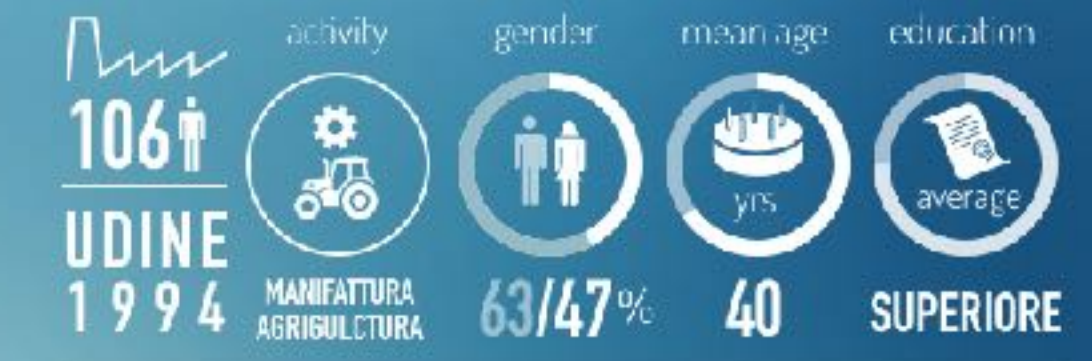
# Credentials: Circular Economy

## RoteaX Re-raw materials & long-LifeCycle Assessment



### PLAXTECH ROTEAX

SOCIAL AND ENVIRONMENTAL INITIATIVE  
plaxtech srl



#### MAIN SOCIAL INITIATIVES



The data refer to GHG emissions expressed in terms of CO<sub>2</sub> eq. weighted by sector and drawn from literature



# Credentials: Circular Economy

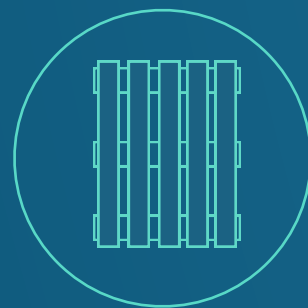
## RoteaX Carbon Footprint Circular Economy models



**plaxTech**  
PLASTIC TECHNOLOGY



EMISSIONS  
4  
AREAS OF INTERVENTION



RE-DESIGN PALLET EUR, PHILIPS, MINI



TRIGENERATION  
VERY HIGH EFFICIENCY 75%



CHEMICAL COMPONENTS



LOGISTICS & TRANSPORT

EMISSIONS  
4  
REDUCTION INTERVENTIONS



ZERO WASTE



CIRCULAR ECONOMY



ENERGY EFFICIENCY and RENEWABLE SOURCES



PURCHASE GREEN CREDITS

ADVANTAGES  
✓

- ✓ DIFFUSION OF HIGHLY EFFICIENT TECHNOLOGIES AND PROCESSES
- ✓ BETTER ENVIRONMENTAL PERFORMANCE MANAGEMENT
- ✓ CIRCULAR ECONOMY, LIFECYCLE NEW MATERIALS
- ✓ REDUCTION OF COSTS, EMISSIONS

REDUCTION  
-19%  
EMISSIONS CO<sub>2</sub> COSTS

SAVING COSTS - CO<sub>2</sub>

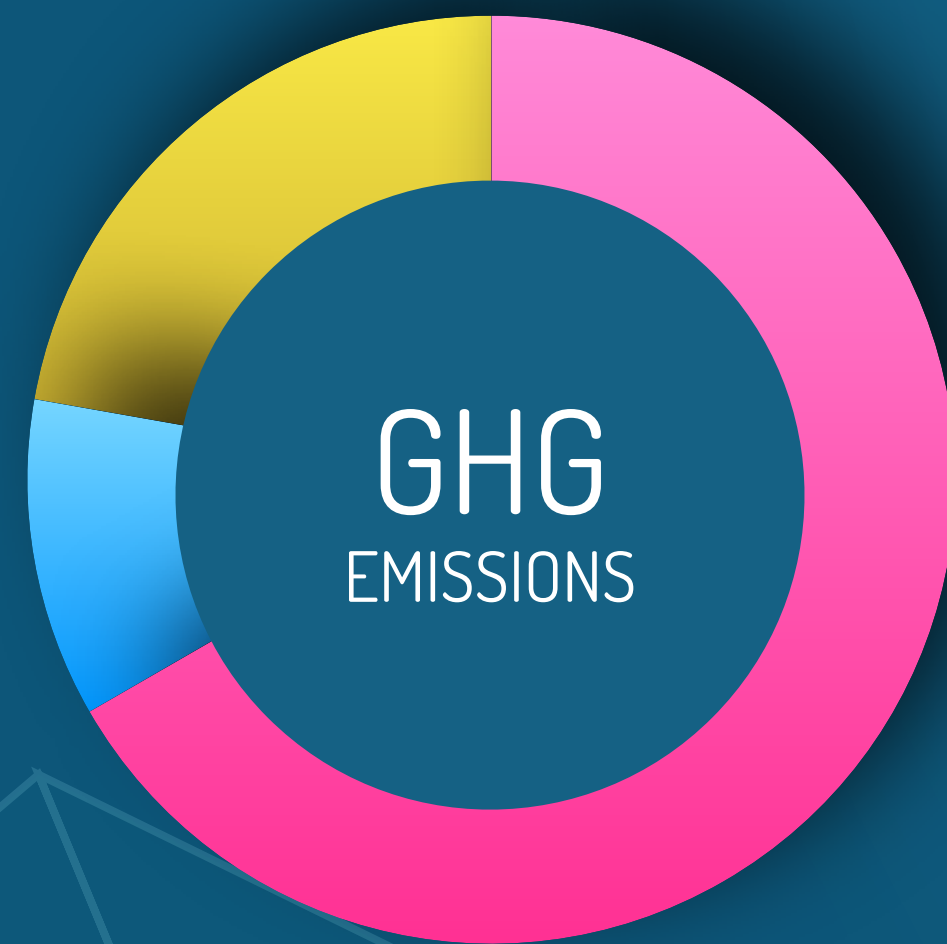


The data refer to GHG emissions expressed in terms of CO<sub>2</sub> eq. weighted by sector and taken from literature



# Credentials: Ecobuilding

Tsinghua University Beijing GHG emissions inventory & circularity



● Scope 1 ● Scope 2 ● Scope 3

GHG emissions inventory



■ Natural Gas    ■ Electricity    ■ Mobility in use  
■ Material input    ■ Mobility staff    ■ Waste management  
■ Other

## ACTIVITIES

### IDENTIFICATION

Classification and characterization of GHG emission sources  
 Carbon Footprint Analysis, direct and indirect energy consumption  
 Identification of energy efficiency measures  
 Identification of best practices for neutralization (offsetting)

### CALCULATION

Sustainable mobility and sharing platform  
 Improving illumination, product as service  
 Long-Lifecycle heating system  
 Recycling, re-raw materials, ZeroWaste management

## RESULTS

- ✓ Emissions classification inventory
- ✓ Energy Efficiency saving and renewable energies
- ✓ Circular Economy metrics
- ✓ MKTG & Communication



# Credentials: Ecobuilding

## Tsinghua University Beijing GHG emissions inventory & circularity

ANALYSIS

4

ACTIVITY

EMISSIONS

4

INTERVENTION  
AREAS

EMISSIONS

4

REDUCTION

ADVANTAGES



GLASS, WOOD AND  
NEW MATERIALS



HEATING & AIR  
CONDITIONING  
INTEGRATION



THERMO ACOUSTIC  
ISOLATION



GREEN ROOF TOP &  
TERRACES



LIGHTING, PUMPS,  
SWITCH INTEGRATION



HIGH-EFFICIENCY  
TRIGENERATION 75%



FUEL SWITCHING



LOGISTICS &  
TRANSPORT



WASTE HEAT  
RECOVERY



SUSTAINABLE SOIL  
USAGE



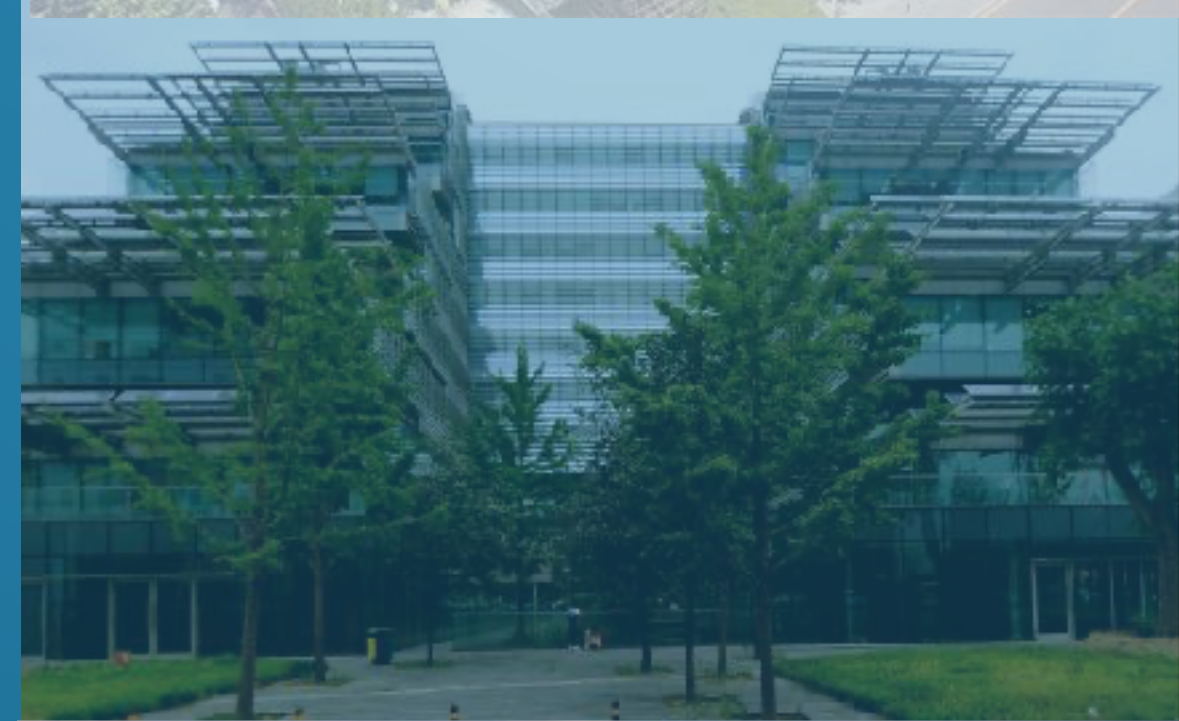
ENERGY EFFICIENCY &  
RENEWABLE SOURCES



CARBON CREDITS

- ✓ DISSEMINATION OF TOP LEVEL TECHNOLOGIES TO STAKEHOLDERS
- ✓ MIGLIORE GESTIONE DELLE PERFORMANCE AMBIENTALI
- ✓ LIFECYCLE NUOVI MATERIALI, LIGHTING E GREEN BUILDING PHILOSOPY
- ✓ ANALISI COSTI / BENEFICI, INVESTIMENTI/RENDIMENTI

The data refer to GHG emissions expressed in terms of CO<sub>2</sub> eq. weighted by sector and drawn from literature





# Credentials: Ecobuilding

Fassa Bortolo building products Carbon Footprint universal water-based paint 10lt drum

## ANALYSIS BORDER

IDENTIFIES  
**2**  
MAIN IMPACT AREAS



DRUM PLATE FRAME



CHEMICAL AND MINERAL COMPONENTS



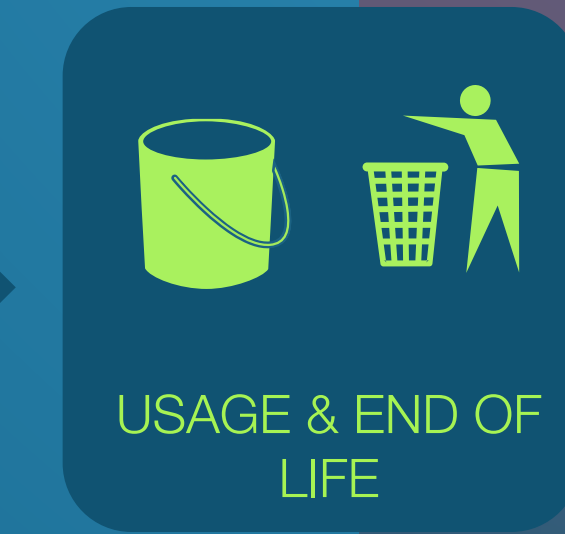
MATERIALS & TREATMENT



PRODUCTION



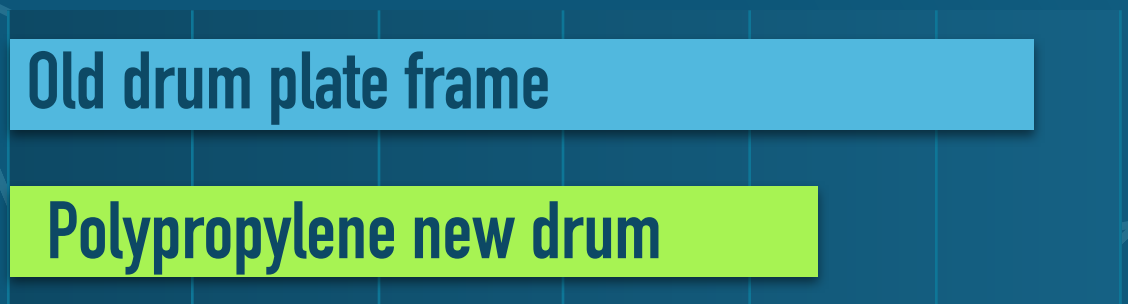
DISTRIBUTION & STORAGE



USAGE & END OF LIFE

PROPOSALS  
**3**  
INTERVENTION AREAS

KgCO<sub>2</sub>eq/product



**UPSTREAM PROCESSES**  
Drums & packaging  
Chemical component  
Mineral component  
Consumables

**CORE PROCESSES**  
Energy consumption  
Water consumption  
Waste management

**DOWNSTREAM PROCESSES**  
Transport  
Distribution & POS  
Storage

**DOWNSTREAM PROCESSES**  
Washing  
Disposal  
Packaging

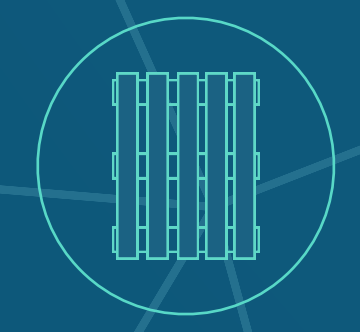
EMISSIONS  
**-21%**  
REDUCTION



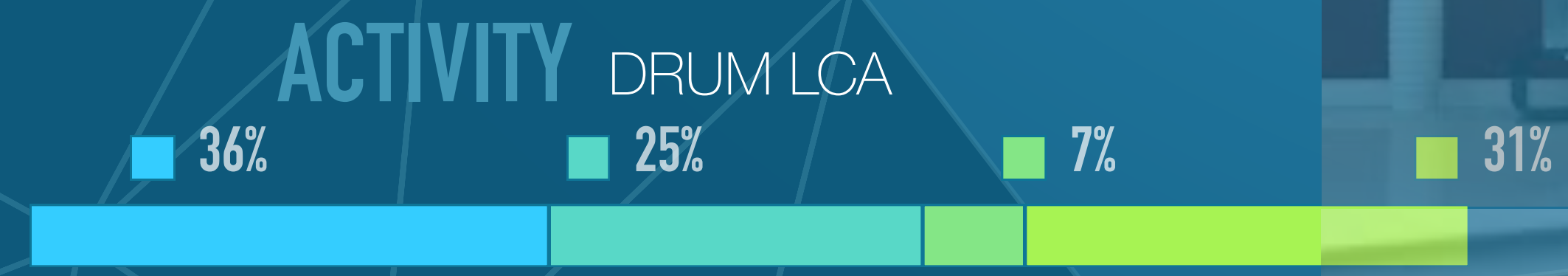
DRUM MATERIAL CHANGE



COMPONENT CHANGE STUDY



PALLET MANAGEMENT IMPROVING



Supply-chain metrics



Carbon Footprint metrics calculation



Emissions reduction proposals



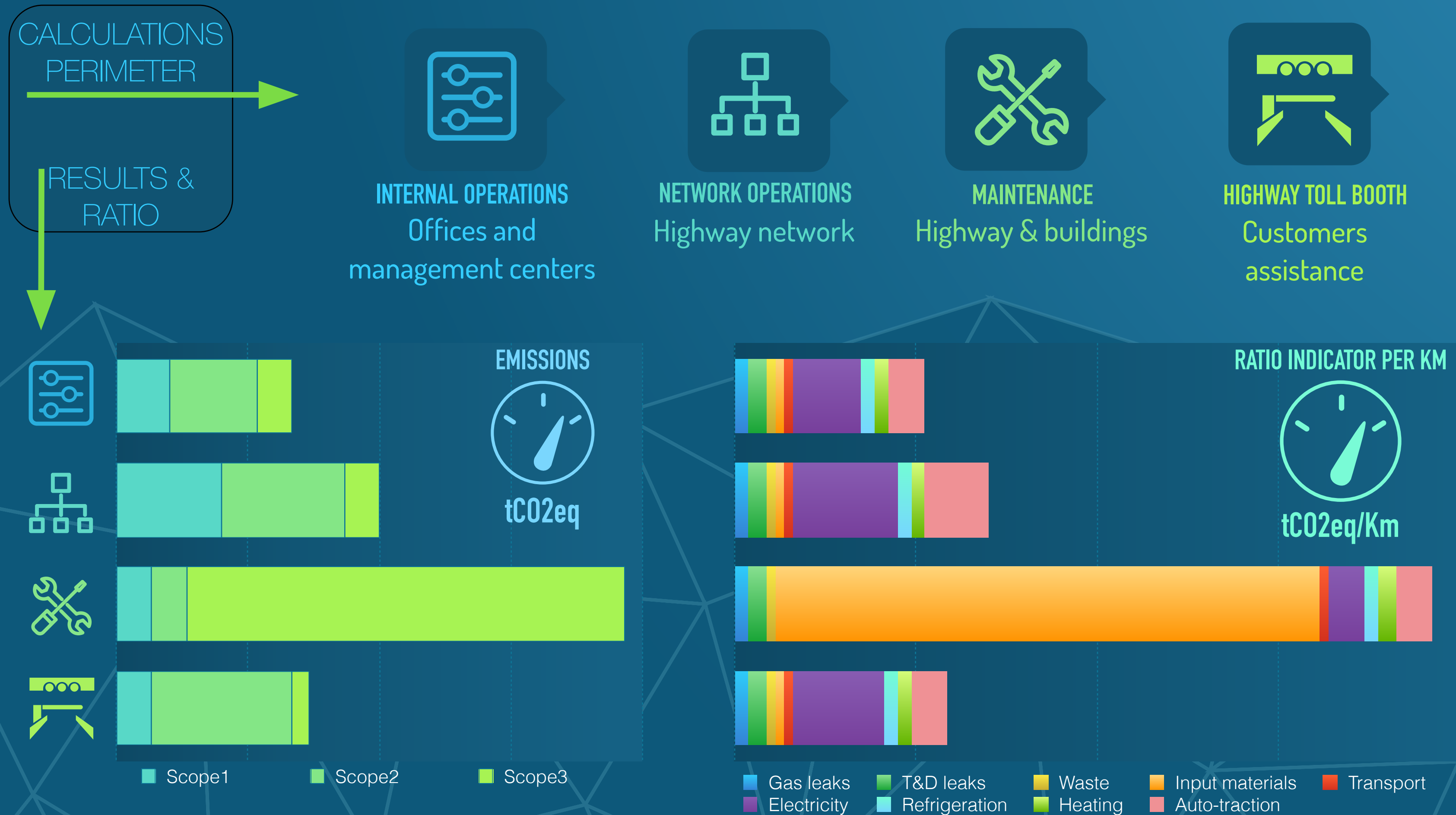
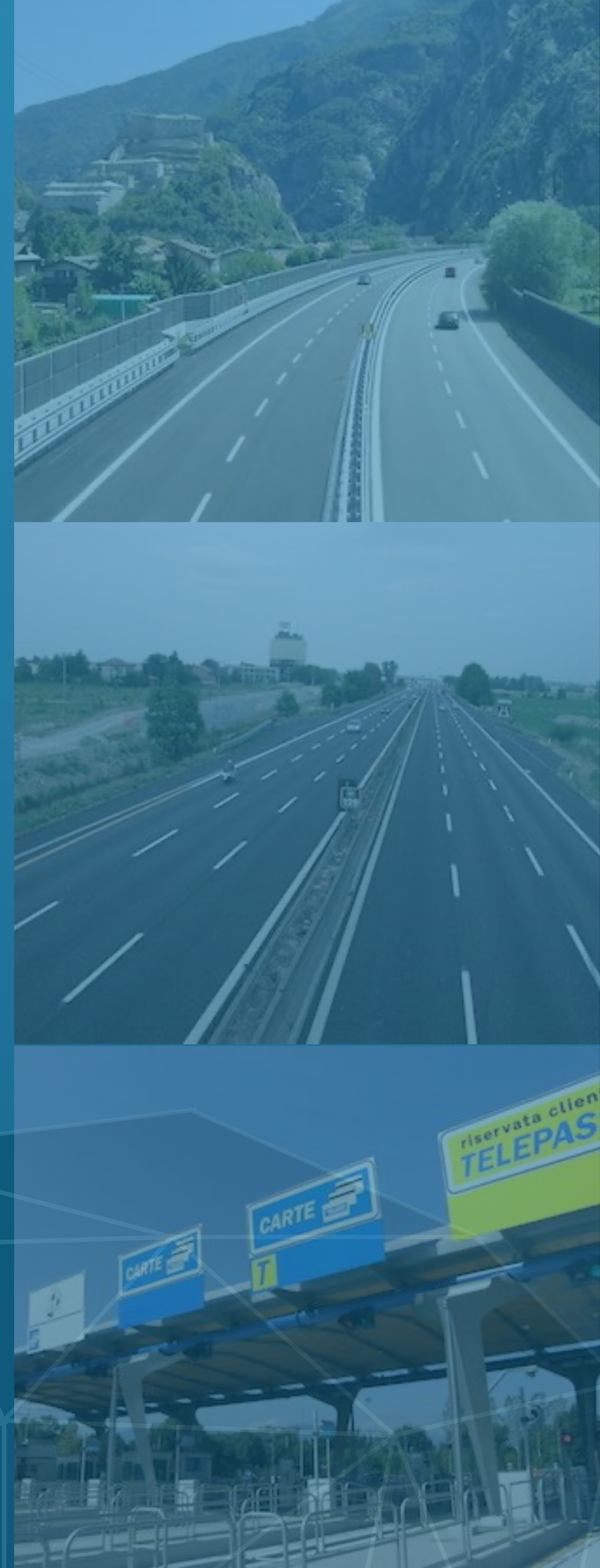
Marketing & communication

The data refer to GHG emissions expressed in terms of CO<sub>2</sub>eq. weighted by sector and drawn from literature



# Credentials: Infrastructure

Autostrade per L'Italia Carbon Management process definition, Carbon Footprint and highway infrastructure reduction measures





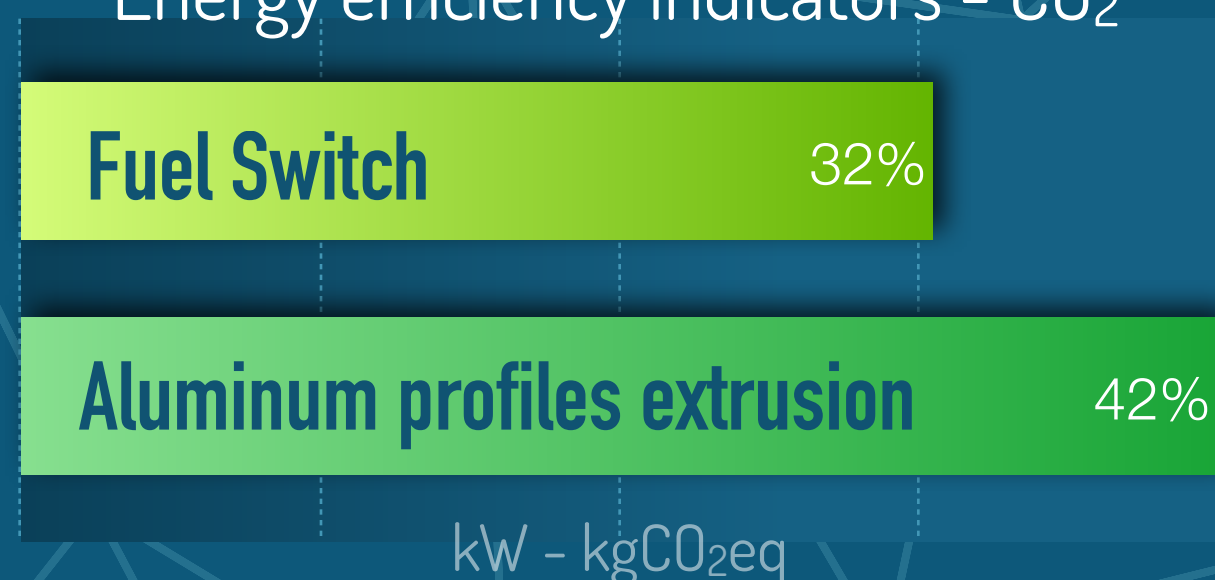
# Credentials: Aluminum

Phoenix International, production plant Energy Efficiency, Carbon Footprint & reduction measures



● Electricity ● Natural Gas ● Paper  
● Waste ● Gasoline ● Water

Energy efficiency indicators - CO<sub>2</sub>



## ACTIVITIES

Classification and characterization of emissions  
Reshaping of energy needs  
Identification of energy efficiency scenarios  
Identification of best practices in the production, **general management** and **mobility departments**

## CALCULATION

You consume direct and indirect energy  
Other GHG emissions  
Offsetting potential

## RESULTS

Reduction of energy consumption, kW of power used and related Carbon Footprint

- ✓ Emissions classification inventory
- ✓ Identification of intervention / improvement areas
- ✓ Realization of very high efficiency systems
- ✓ Integration of top performance technologies



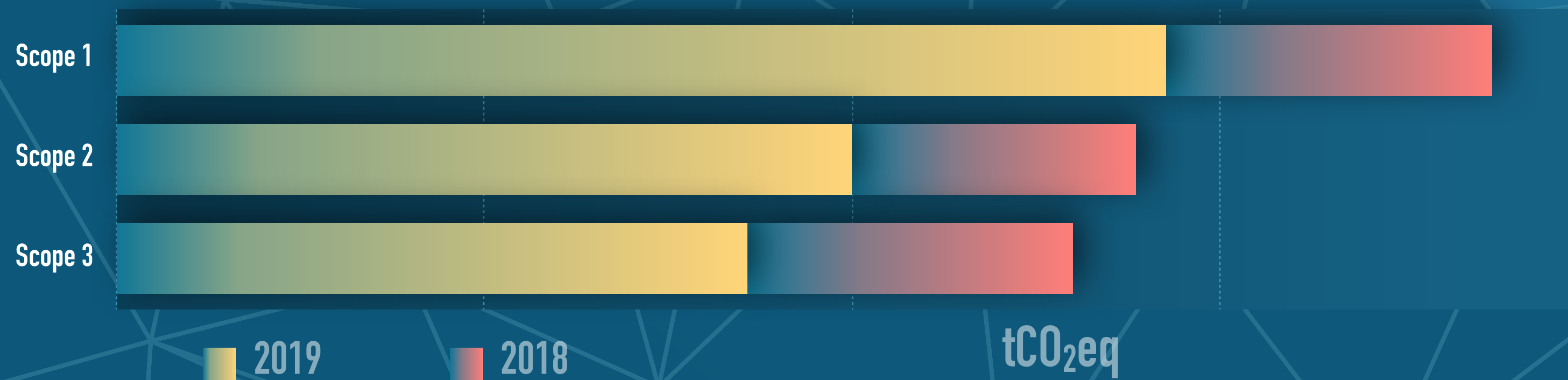
# Credentials: Aluminum

Phoenix International, production plant sustainability performance indicators

## ACTIVITIES



Identification of the major sources of GHG emissions



The data refer to GHG emissions expressed in terms of CO<sub>2</sub>eq. weighted by sector and drawn from literature



# Credentials: Railway

NTV Italo Train Carbon Management process definition, Carbon Footprint and railway infrastructure reduction measures



**.italo**  
Business Transport Management



- Railway transport
- Infrastructure
- Input materials
- Mobility
- Waste management
- Water consumption

## ADVANTAGES

- ✓ Sustainable transport
- ✓ Marketing & Communication

## ACTIVITY

### IDENTIFICAZIONE

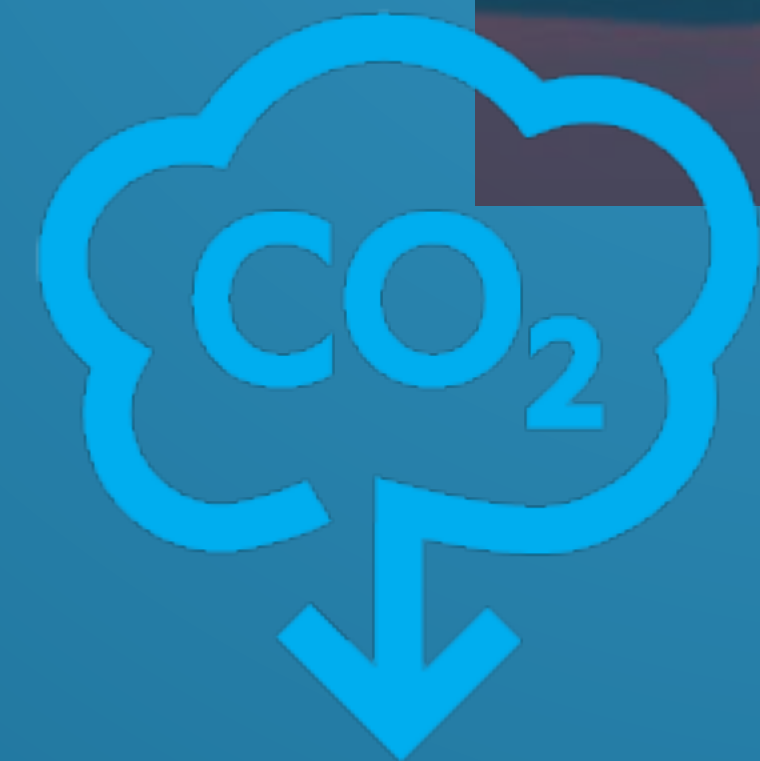
Emissions sources involved in the rail transport service (IE electricity, resources used, passenger mobility, waste management, infrastructure)

### CALCULATION

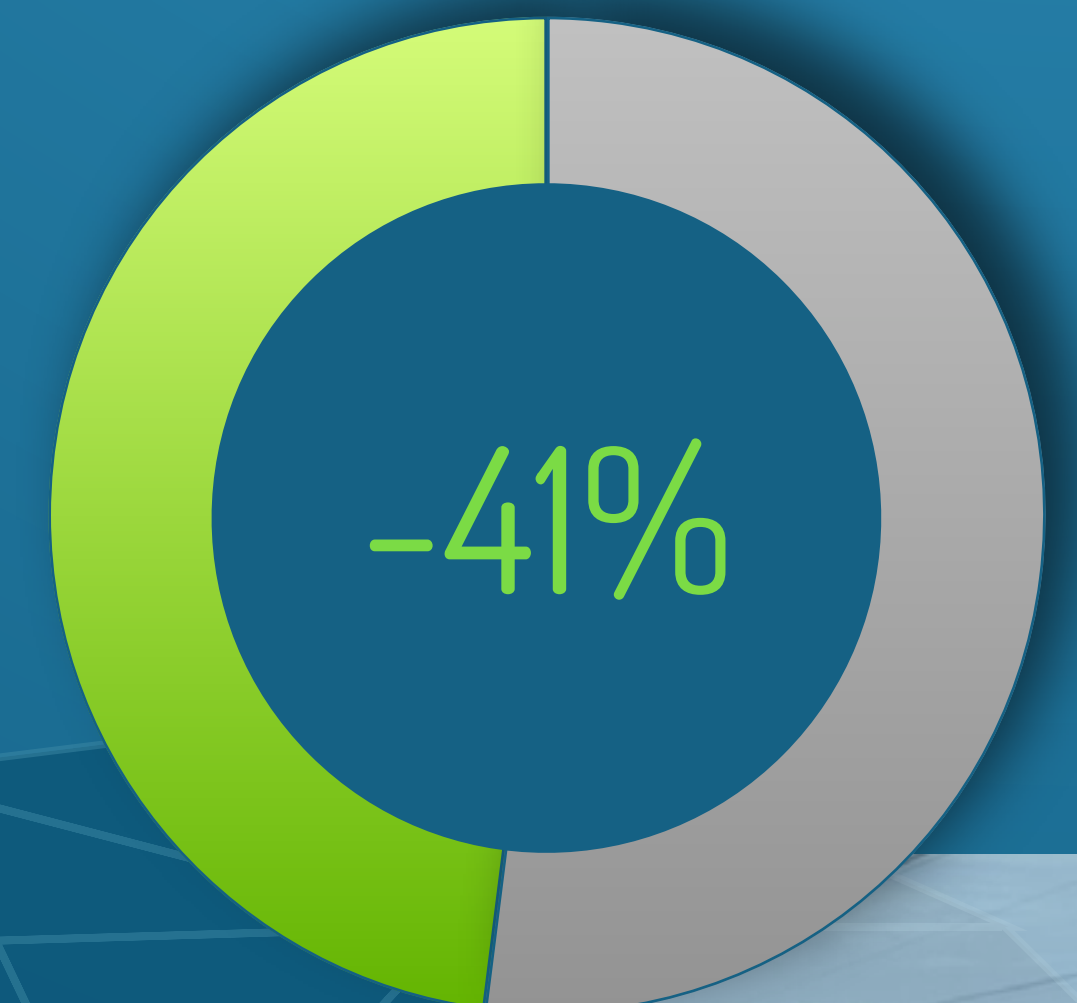
Specific energy consumption for the transport service  
GHG emissions per passenger and km traveled

## RESULTS

- ⊕ Emissions characterization and classification
- ⊕ Areas identification for intervention/improvement



Carbon Emissions Reduction



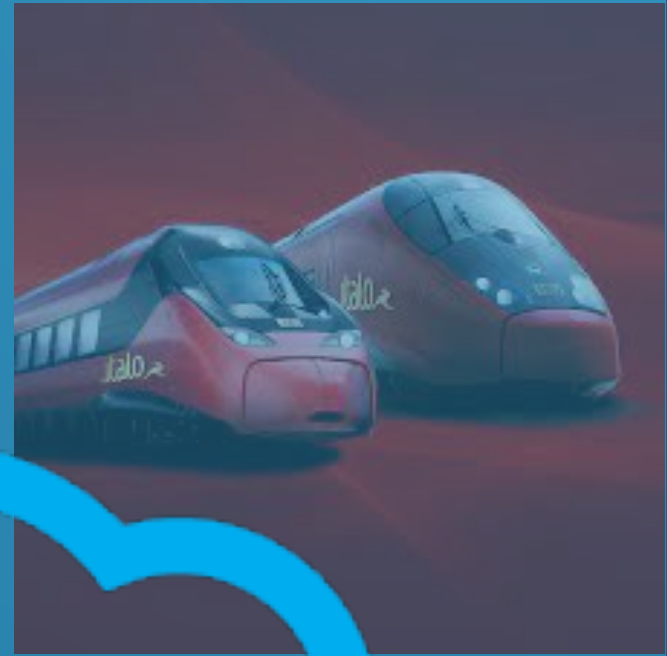
- GHG residues
- GHG reduction





# Credentials: Railway

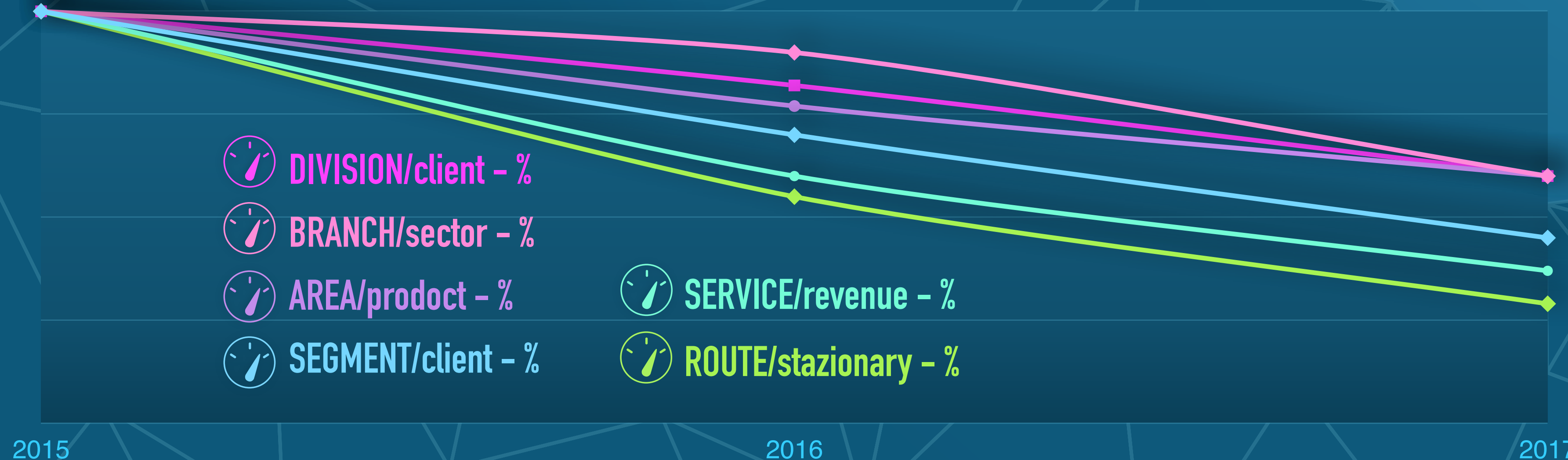
NTV Italo Train Carbon Management process definition, Carbon Footprint and railway infrastructure reduction measures



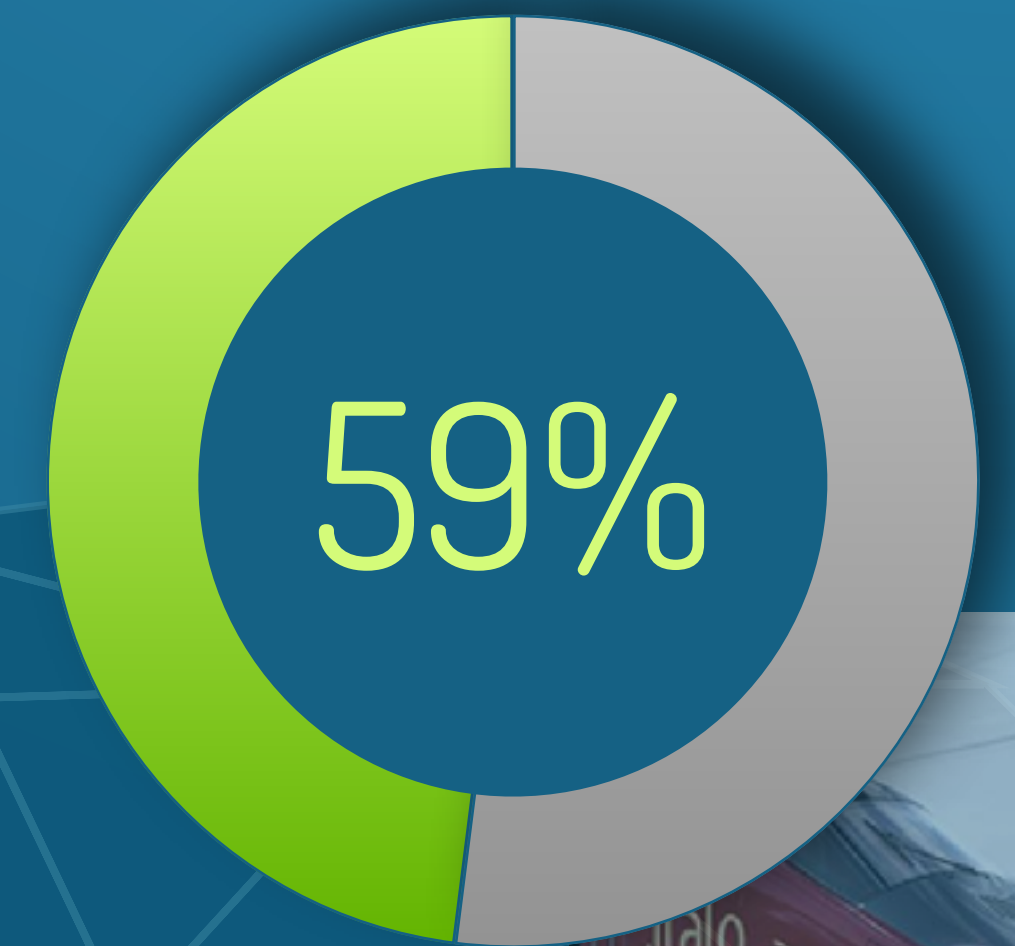
GRI 305-2 indirect emissions per GHG (ex-scope 2) and related KPI



Carbon Footprint KPI % reduction



CO<sub>2</sub> neutralization



● GHG residues  
● GHG reduction

The data refer to GHG emissions expressed in terms of CO<sub>2</sub> eq. weighted by sector and drawn from literature



We all have two things in common: we want to win the great challenge of our times: reaching Kyoto Protocol and Paris Agreement **climate change goals** and we love **binary code**. We are **agents of change**, working to build a sustainable future, helping organizations to define, shape and implement clever and successful environmental sustainability solutions. We are engaged in Creating Shared Value leading resilient strategies, robust metrics, useful tools, and credible communications to a diverse set of organization, brands, public and private companies





Discover how to create value with a strategic approach to ESG management



get the game changer demo  
and full documentation

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