

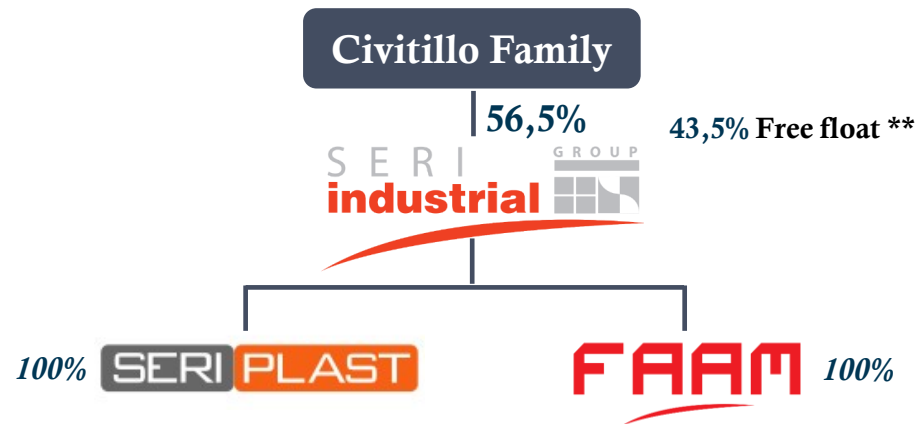
# BUILDING GREEN COMPANIES FOR A BETTER TOMORROW

Investor Presentation- 2024

Seri Industrial is a Group of companies with an **extensive legacy in plastic materials processing and recycling**, and in the **development and production of customized lithium-ion and lead-acid battery systems**

In the last years SERI is emerging as a **leading player in Europe's energy and ecological transition**, thanks to the **1<sup>st</sup> plant in Italy & Southern Europe** for the mass production of **lithium cells, modules & battery solutions**, and to one of the **biggest project in Europe** for the **recycling of post-consumer packaging**

# SERI AT A GLANCE

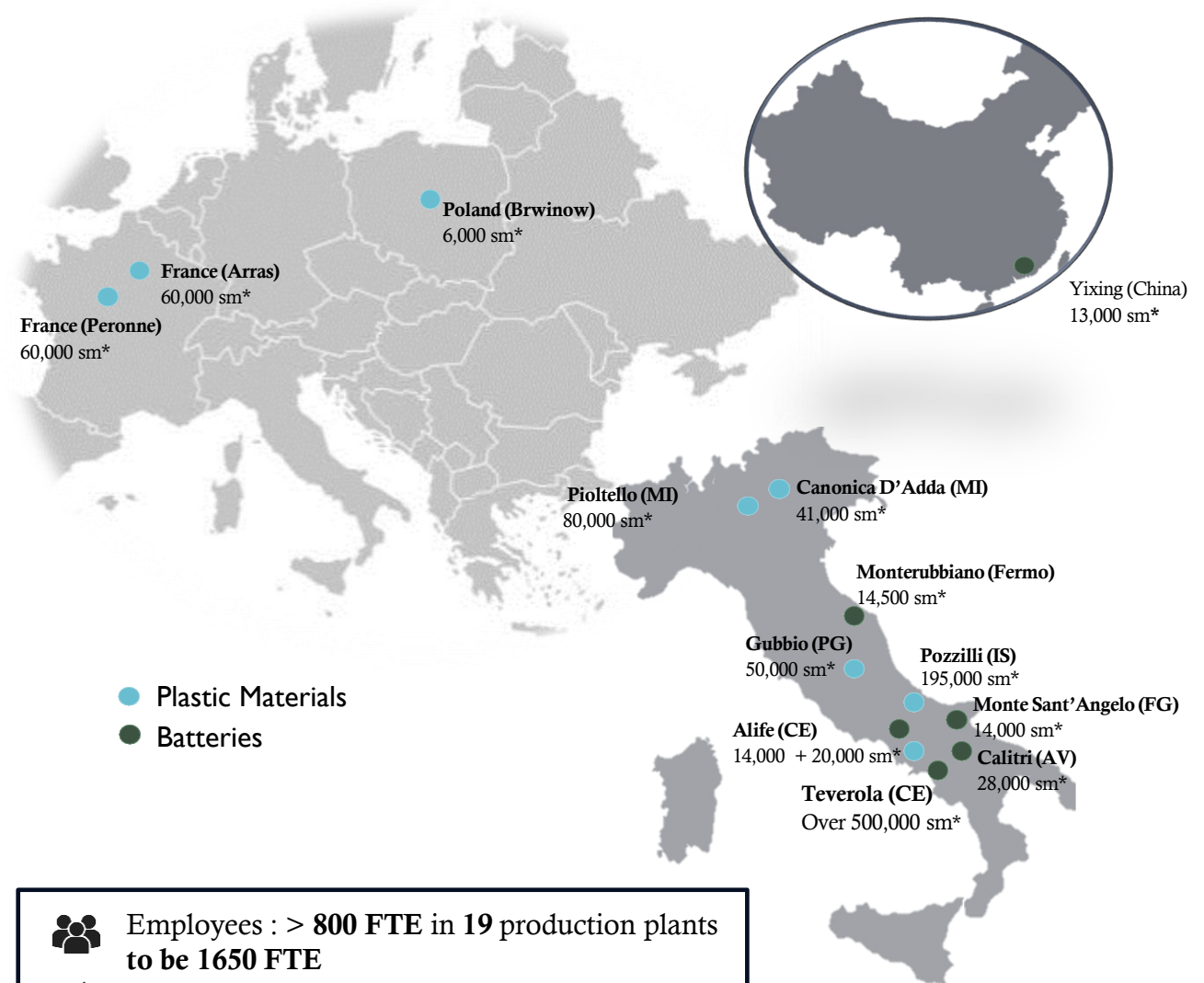


**SERI Industrial** is a company listed on Milan's Euronext ("EXM") stock exchange; it is a **vertically integrated player** along the supply chain of batteries and plastic materials.

- **SERI PLAST (Plastic Materials):** active in the **processing and recycling of plastic materials** for battery, automotive and thermo-hydro sanitary markets, as well as in the **recycling and transformation of post-consumer packaging waste** into raw material for the consumer goods market through a JV with Unilever (P2P)



- **FAAM (Batteries):** active in the **production of li-ion cells, modules and battery systems** for ESS, industrial and special applications; production of **lead-acid batteries** for traction, starter and stationary applications; **recycling** of end-of-life batteries, **from plant design to recovery** of materials



Employees : > 800 FTE in 19 production plants to be 1650 FTE



Revenues : 200 M€ (FY 2023), 2 Billion expected by 2026



Investments : 2017-2023 205 M€ , > 600 M€ in the next 2 years

# BACK TO OUR STORY

## TOWARD A VERTICAL INTEGRATED MODEL – LEGACY

### 1999 – 2010

- Civitillo's family founds the SERI Group as a consulting company, engineering and real estate
- Start up of **SERI PLANT Division** (turnkey plants for the recycling of end-of-life batteries) and **PP Compounds production**

### 2010 – 2016

The company executes several acquisitions:

- **Plastam and ICS** (moulding of plastic boxes and lids for batteries)
- **COES** ( extrusion and moulding of pipes and fittings for building applications)
- **FAAM** (production of battery systems)
- **Exide's** plastic production plant
- **Lithops** (R&D center for the lab-development of LPF cells)
- **Repiombo** (recycling of EOL batteries)
- IMI Fondi Chiusi (now **Neuberger**) enters the share capital of Seri

### 2017 – 2018

- Acquisition and industrial conversion of Whirlpool's plant in Teverola and **start-up of lithium project**
- Seri goes public through a reverse merger in a natural shell company

### 2019- 2022

- **TEVEROLA 1** Pilot Line investment and production started

## THE LATEST UPDATES – NEW INITIATIVES

### TEVEROLA 2

- In 2019 the European Commission approves the EU IPCEI project (**TEVEROLA 2, 8GWh/year Gigafactory**)
- **Start-up of activities related to Teverola 2** and **issuance** of the Ministry of Economic Development decree, granting a **subsidy of more than €500 million** to support the project
- By 2026 production start-up is expected for beyond-state-of-the-art lithium cells

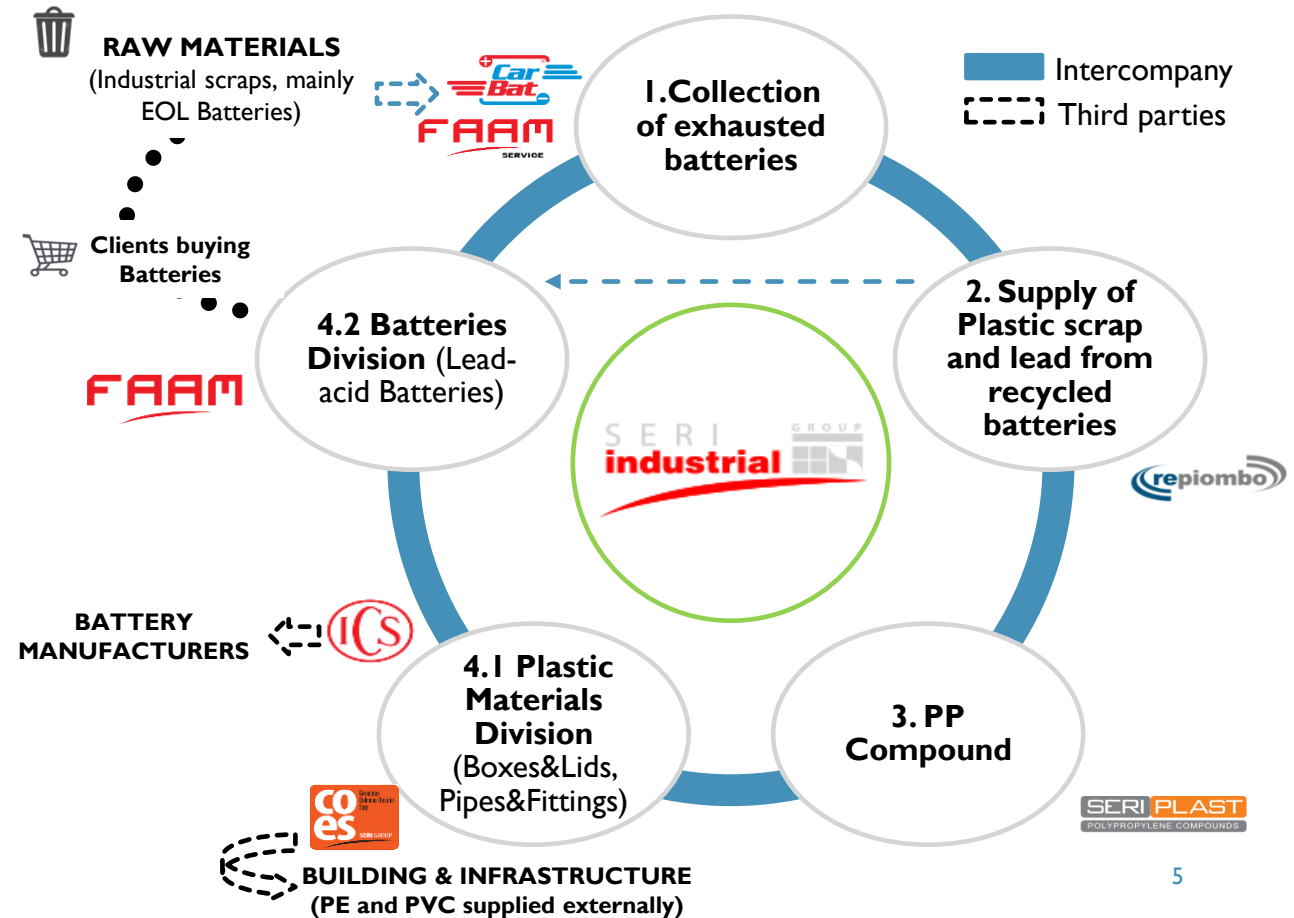
### P2P

- In 2021 **sign of JV agreement with Unilever and establishment of P2P** (production of recycled plastic polymers from post-consumer packaging) with the goal to reindustrialize an existing Unilever plant
- In 2022 **sign of the Development Contract by MIMIT and Invitalia**, granting a financial **support of €82 mln**, and completion of the **plant layout design**



# CIRCULAR ECONOMY IN OUR LEGACY BUSINESS

"The mission of Seri Industrial is to accelerate the energy and ecological transition towards sustainability and decarbonization, controlling the entire supply chain of batteries and plastic material. The activities shape a fully integrated cycle and recovery of raw materials, representing a unique example of Circular Economy."



# OUR LEGACY BUSINESSES



**Recovery of plastic scrap from EOL batteries:** recycled PP Compounds (Serilene and Serifill) for the automotive and battery market

✓ Revenues ~22,6 M € (98% aligned\*)



**Lead-acid Batteries for:**

**Motive Power :** Top Endurance; Tubular Traction Maxi; Tubular Traction Star; TraLeg- Heavy Plus Technology

**Stand-by Power :** FLOODED; VRLA GEL; VRLA AGM

**Starter Power (no OEM) :** Power Technology and Energy Technology for heavy duty and special vehicles

✓ Revenues ~ 65,8 M€ (100% aligned\*)



**Pipes and fittings for Building:** Gravity or pressurised waste discharge systems; adduction and heating systems

**Pipes for Infrastructure:** PVC pipes; PVC pressure pipes; PE for pressurised water and gas pipelines; Enki modules

✓ Revenues ~ 39,3 M € (20% aligned\*)



**Lead Battery Market (plastic boxes):** Battery boxes; Arrestors devices for boxes; Battery pole handles; Battery lids

✓ Revenues ~ 45,9 M € (60% aligned\*)

\* with the EU Taxonomy Regulation



# LITHIUM ACTIVITY **FRAM**



The 1<sup>st</sup> **plant in Italy** & Southern Europe for the mass production of **lithium cells, modules & battery solutions**



**100% made in Italy**



**100% Cobalt free**



**95% target recyclable** quantity  
in % of spent battery

- LFP/LMFP technology as cathode active material
- Water-based solution in the electrode production (instead of organic solvents)
- Customized battery with the in-house development of the BMS and converters
- Recycling at end-of-life of active materials through a clean hydro-process



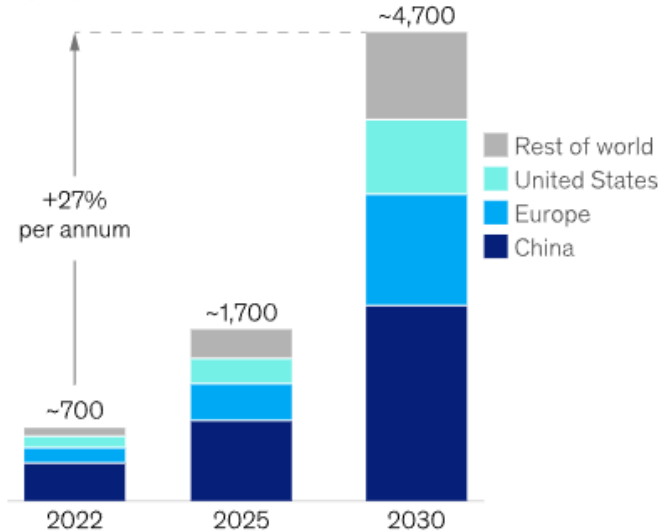
From R&D activities to the **first production line TEVEROLA 1** and the Mediterranean Gigafactory **TEVEROLA 2**

# AN EXPONENTIALLY INCREASING DEMAND

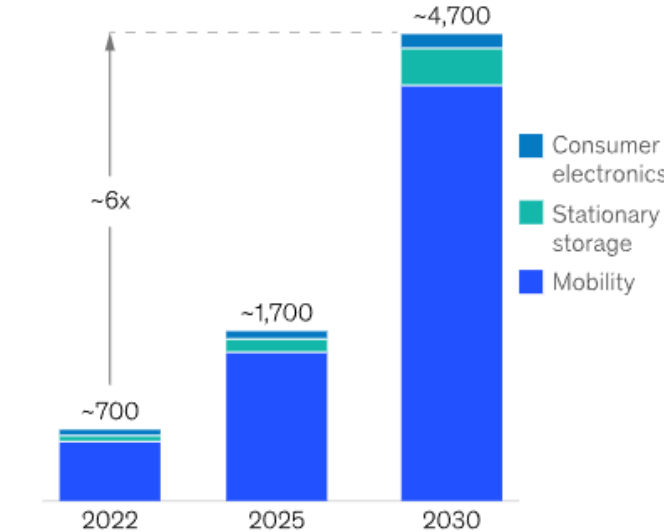
The World needs Batteries

Global Li-ion battery cell demand, GWh, Base case

By region



By sector



Especially Europe:

- Li-Batteries have a strong share in the Green technologies to meet the EU goal cutting gas emissions by 55% before 2030
- There is a shortfall in supply, where there are few domestic manufacturers (mainly battery assemblers) in a high-growing demand context

<sup>1</sup>Including passenger cars, commercial vehicles, two-to-three wheelers, off-highway vehicles, and aviation.  
Source: McKinsey Battery Insights Demand Model



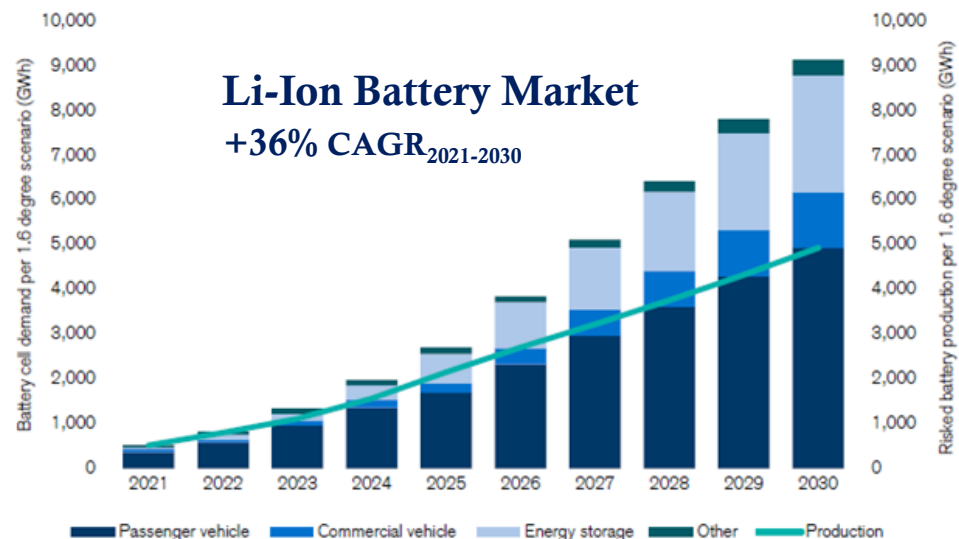
# MARKET FORECAST – BATTERIES

The global Li-ion battery market is estimated to grow to about 9,000 GWh by 2030, compared to around 580 GWh in 2021.

## Global Li-ion batteries cell demand

GWh, base case

(GWh per year of new batteries)



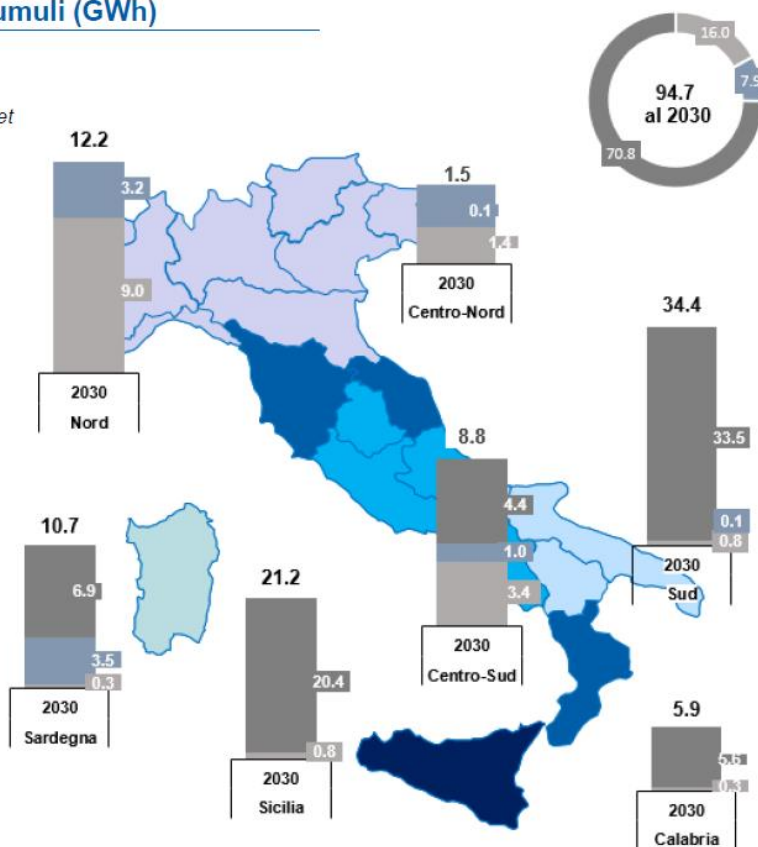
- More specifically, the global passenger vehicle and **energy storage applications market** account for the largest increase in estimated demand.
- **ESS applications**, a segment of particular importance for the Group, **are estimated to reach around 2,500 GWh, equal to 29% of the total demand for lithium batteries by 2030**, compared to 139 GWh in 2021.

**Global demand for batteries is increasing**, driven largely by the imperative to **reduce climate change** through electrification of mobility and the broader energy transition

# MARKET FORECAST - STORAGE IN ITALY SPLIT BY AREA

## Capacità installata accumuli (GWh)

- Accumuli Small-Scale
- Accumuli Capacity Market
- Accumuli Utility-Scale



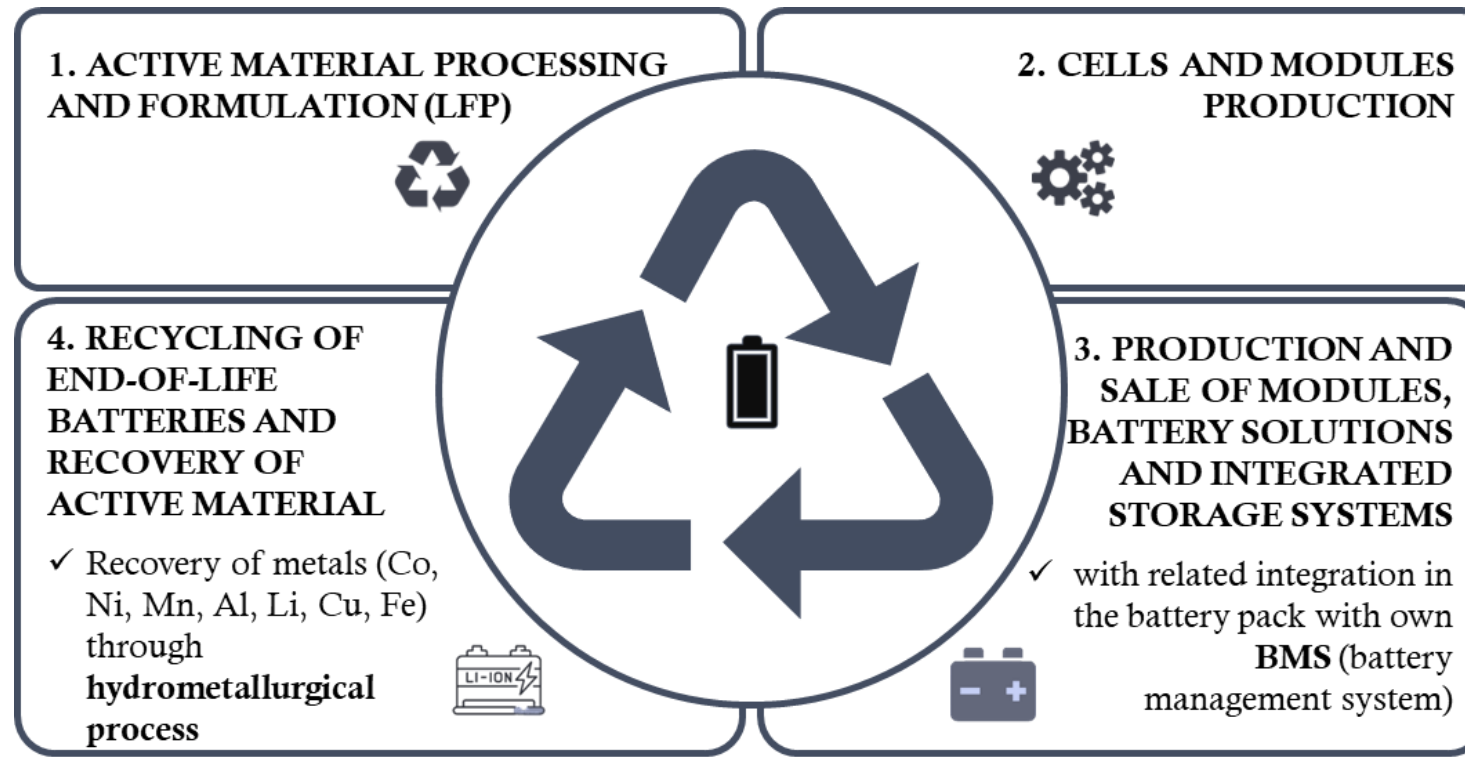
The FF55 scenario predicts that almost 100 GWh of additional storage will be needed by 2030 to meet policy targets and curb overgeneration:

- About 71 GWh utility scale;
- about 8 GWh capacity market;
- 16 GWh small scale (batteries associated with rooftop photovoltaics).

- Big systems > 1 MWh
- Small systems < 1 MWh

# LITHIUM CIRCULAR ECONOMY MODEL

The goal is to leverage the already established Vertical Integration of the Group

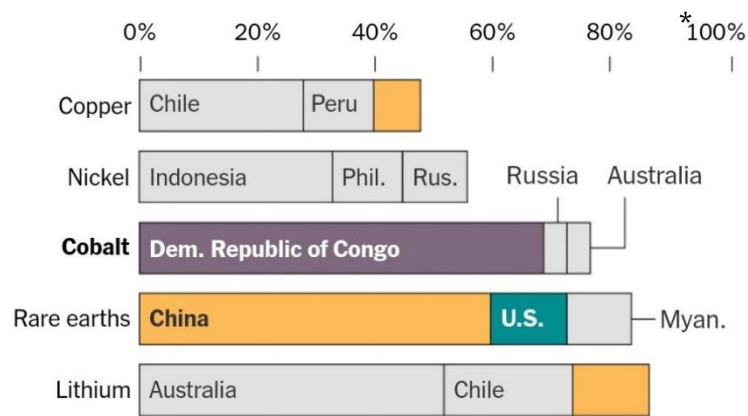




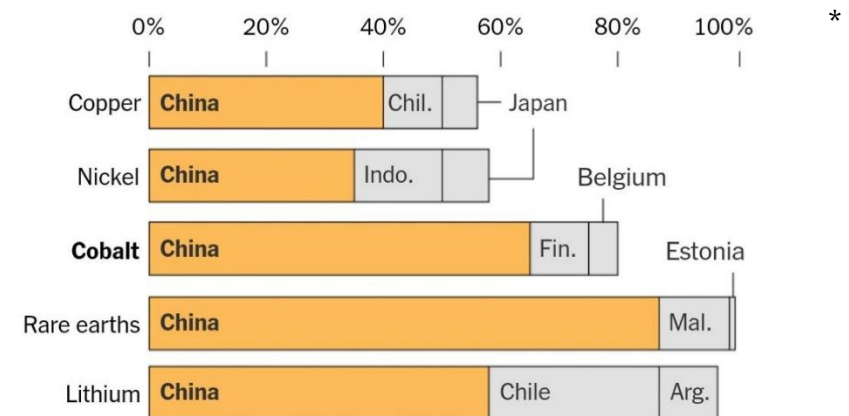
# WHY COBALT AGNOSTIC?



The production of key mineral resources is highly concentrated today. Chart show **top three producers**.



**China dominates the refining and processing** of key metals.



LFP has a lower energy density than NMC...**but degrades at a much lower speed**

2022

Wh/kg



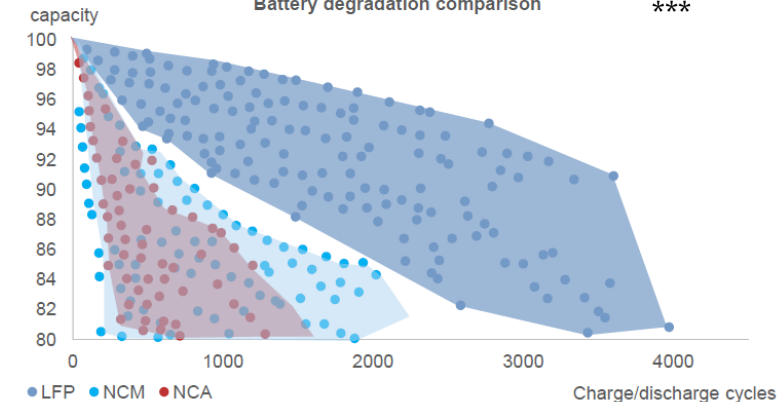
Energy density

■ Cathode level (lhs) ◆ Pack level (rhs)

\*\*

Wh/kg





































% of initial capacity



# EU IPCEI PROJECT

FAAM success story as 'Made in Italy' booming EU position, creating independency from Asia

Commission approves €3.2 billion support by seven Member States for project of common European interest for **battery value chain**

Raw and advanced materials	Cells and modules	Battery systems	Repurposing, recycling and refining
BASF  	ACC  	BMW 	BASF  
Eneris 	BMW 	Endurance 	Endurance 
Keliber 	Endurance 	Enel X 	Elemental 
Nanocyl 	Eneris 	Eneris 	Eneris 
Solvay    	FAAM 	Kaitek 	FAAM 
Terrafame 	SEEL 	SEEL 	Fortum 
Umicore  	VARTA 		SEEL 
		Umicore  	

 GIGAFACTORIES

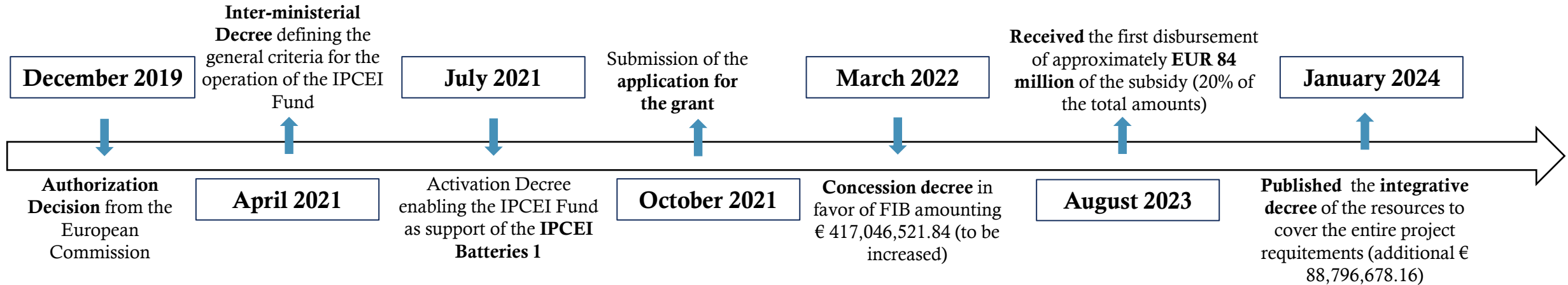


- Member States: Belgium, Finland, France, Germany, Italy, Poland and Sweden
- Integrated project comprising 4 workstreams, covering the battery value chain
- 17 undertakings (some active in more than one Member State) will receive State aid
- 505 M€ assigned to FAAM

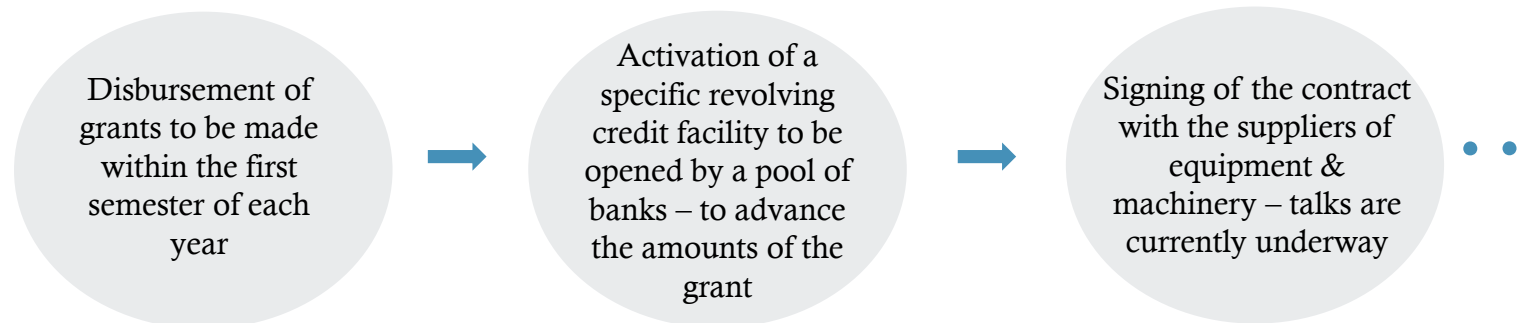
## A EUROPEAN BATTERY VALUE CHAIN

# IPCEI FUNDING TIMELINE

## IMPORTANT PROJECTS OF COMMON EUROPEAN INTEREST

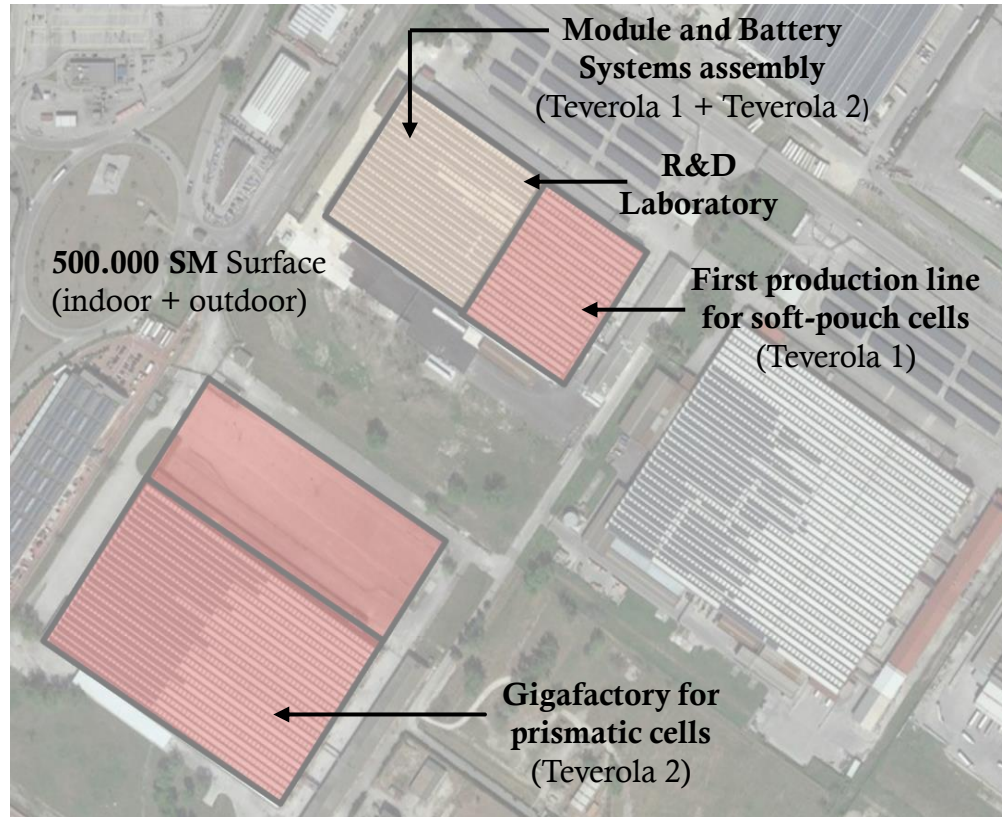


## Next Steps





# TEVEROLA 1&2 PROJECTS DEEP DIVE



 **Capacity**

## TEVEROLA 1

0.3 GWh

 **Cell Format**

 Soft Pouch

 **Technology**

- LFP soft pouch (50Ah)
- High energy density and safe applications
- Integrated **BMS**
- **Water based** solutions

 **Investments**

€70 Million

## TEVEROLA 2

8 GWh

 Prismatic

- **LFP/LMFP** with graphite anodes
- **R&D on Generation 4** (solid state) + sodium-ion

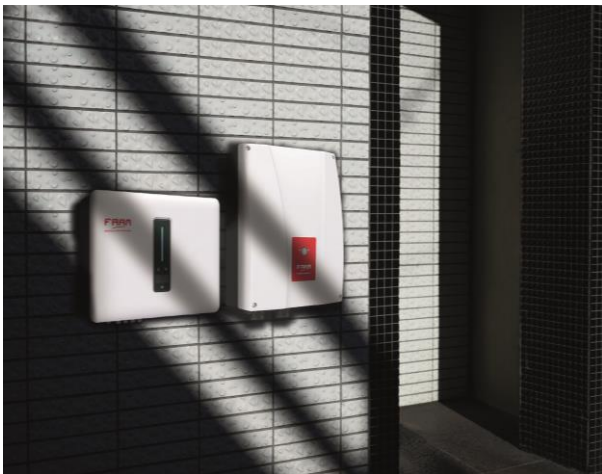
+ **€505 Million**  
(fully funded through EU IPCEI project)



- **50 ton/day of battery treatment** in the recycling pilot line

- **A dedicated cluster for the mass production coupled with R&D Laboratory** co-located with production realizing coin cell to multi-layer pouch cell
- **High-level partnerships** with leading European industrial players

# LITHIUM BATTERY SYSTEM PRODUCT RANGE



ALL MADE WITH IN-HOUSE MANUFACTURED CELLS

## LiHOME

### DOMESTIC STORAGE

- ✓ **Wi-Fi communication**  
IOS/Android App (on request)
- ✓ **Plug & Play solution** (online down-load via QR code). Stand-alone solution
- ✓ **Wall or floor installation**  
(stackable/ side by side)
- ✓ **Energy saving:** efficiency > 98 %

### SPECIAL APPLICATION

- ✓ **Military Applications**
- ✓ **Naval** (solutions for maneuvering and mooring in the naval fields)
- ✓ **Public Transports** (conversion of buses into hybrid motorization and realization of an all-in-house platform)
- ✓ **Charging Stations** (from a single tower to a multi-connected service station)

## LiTRACTION

### MOTIVE POWER

- ✓ **Tailor made projects:** unlimited configurations opportunities; customized design
- ✓ **Plug & Play solution**
- ✓ **Remote service** available
- ✓ **Lifecycles:** > 4.000 cycles (DOD 80%) – 13.000 work hours
- ✓ **Energy saving:** efficiency > 98 %

## LiRACK

### LiBESS

### STORAGE SYSTEMS (BESS and C&I solutions)\*

- ✓ **Tailor made projects:** unlimited configurations opportunities; customized design
- ✓ **Plug & Play solution**
- ✓ **Remote service** available
- ✓ **Turnkey solution** opportunity
- ✓ **High safety level**

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# JV WITH UNILEVER: P2P, A SUSTAINABLE PLASTIC COMPANY



A 50/50 Newco, supported by MIMIT (Ministry of Industries and Made in Italy), with a shared vision of **promoting sustainability in the plastic industry**.

## Strategic Partnership with Unilever

- The JV is reconverting an industrial facility originally owned by Unilever (home care products production)
- Off take agreement of 10 years
- Unilever is committed to purchase at least 65 k tons/year of recycled plastic raw materials (50% of the max. production capacity of 130 tons/year)
- Fixed price (pricing formula indexed to raw material quotations)

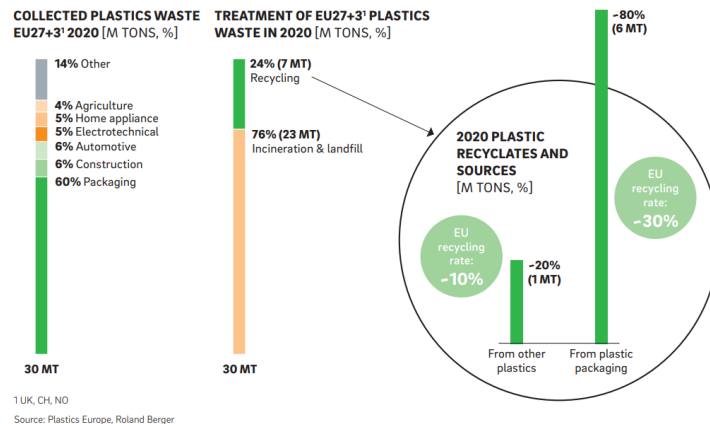


# THE IMPORTANCE OF PLASTIC RECYCLING

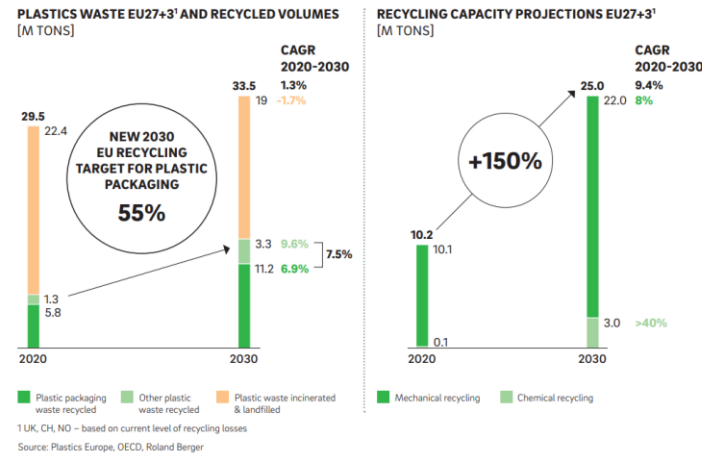
Plastic has a broad range of applications and is a key component of a large number of products. **Plastic volumes** produced have been significantly raising during the last decades and are still **expected to grow** in the future (**1.4% p.a.** for Europe to 2030)

- **Uncovered plastic** is a significant environmental problem that requires urgent action

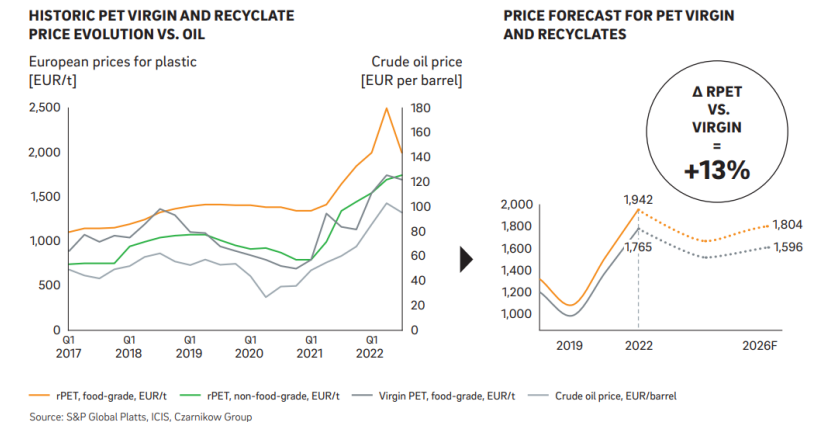
In 2020, 30 megatons of plastic were collected in the EU, of which only 24% was recycled



- To achieve the **EU 55% target** for plastic packaging recycling, recycled volumes will have to almost double by 2030



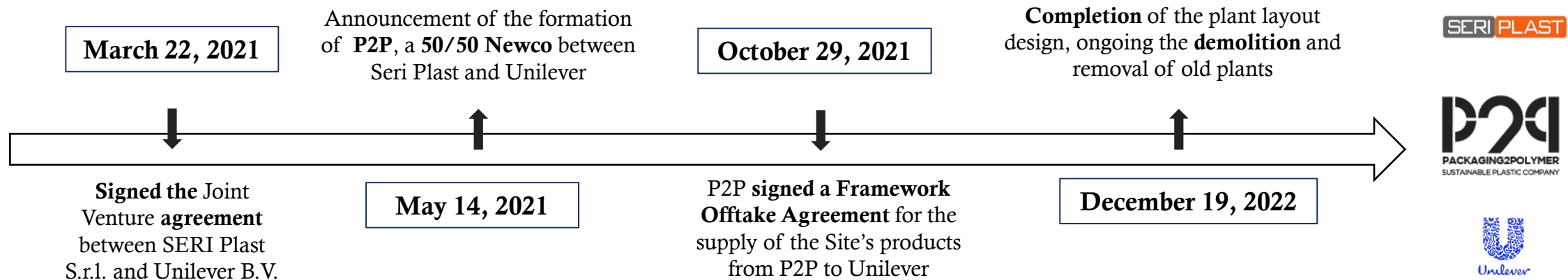
Recyclate prices have been trading slightly above virgin prices in recent times. This is the result of a **sustainability premium**



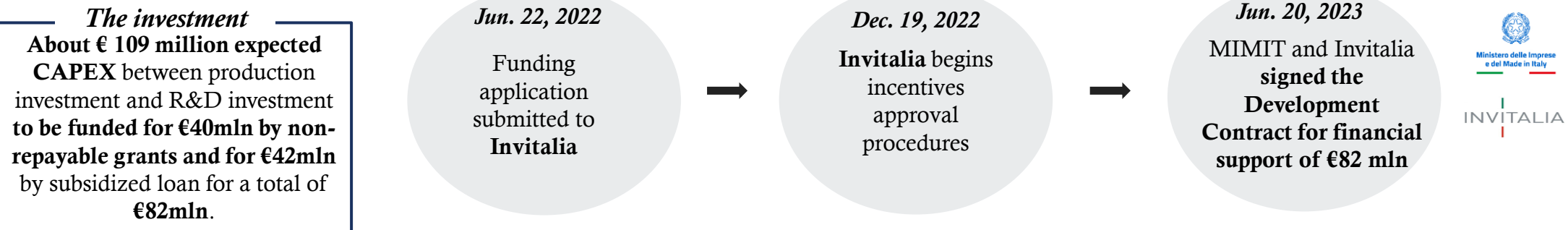
As a result, **bigger margins** are expected for producers

# PROJECT PILLARS

This partnership, brings together the **Seri Plast's extensive know how** and the Unilever's goals of **halving the use of virgin plastic** for packaging by 2025 which forms part of the "Clean Future" project.

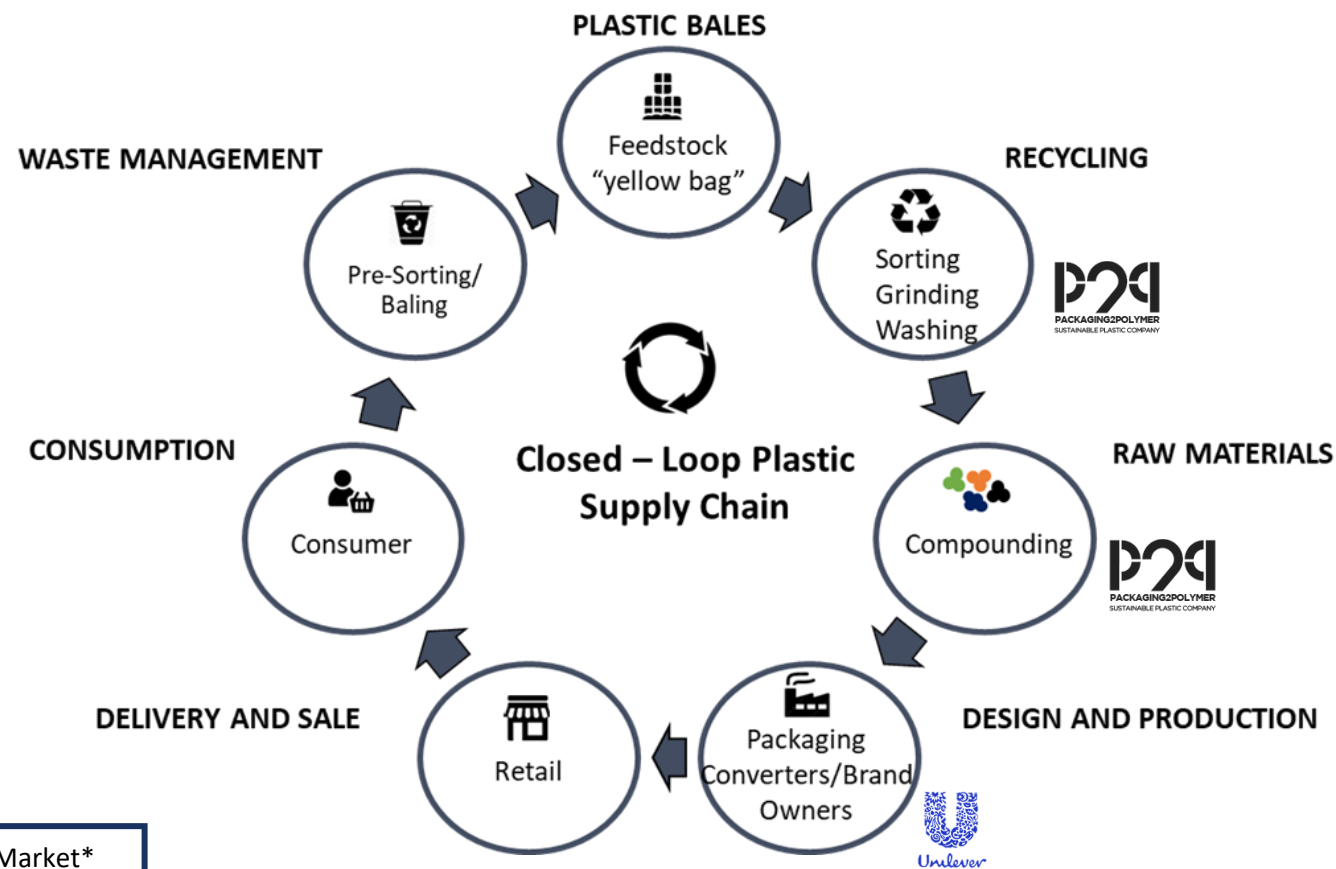


## Project financing



# CLOSED-LOOP PLASTIC RECYCLING

By recycling uncovered plastic (plastic waste that is non collected, recycled or properly disposed), we are able to **reduce** the amount of **waste** that ends up in **landfills and oceans**

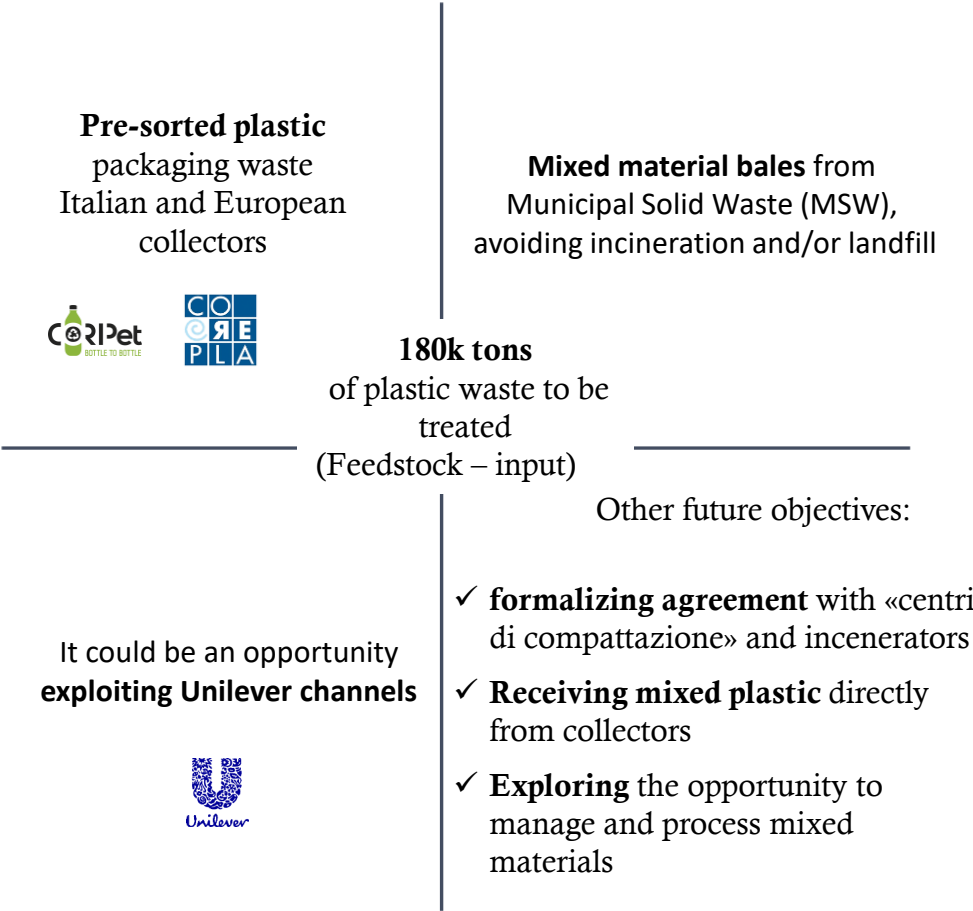


	P2P	Market*
<u>Closed-loop high performance mechanical recycling</u>	100%	25%
Low value mechanical recycling	✗	

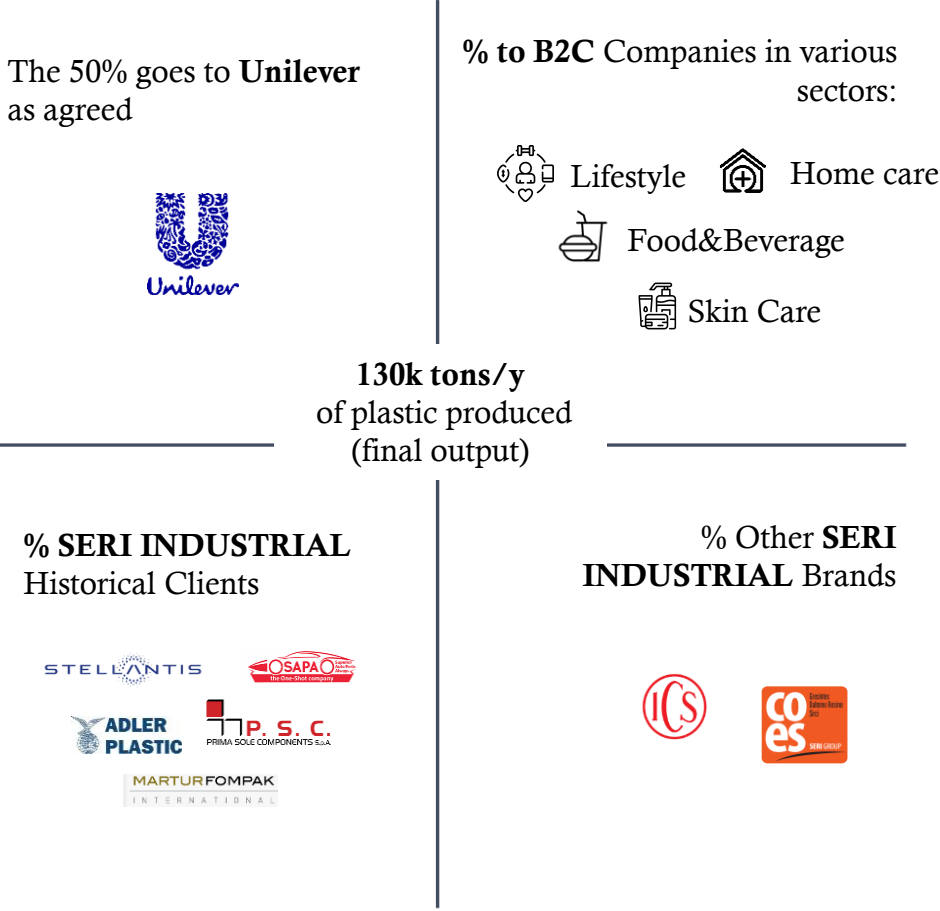
% Of the recycling production

\*Bain & Company, 2019

## Where does plastic come from?



## Where does plastic go to?

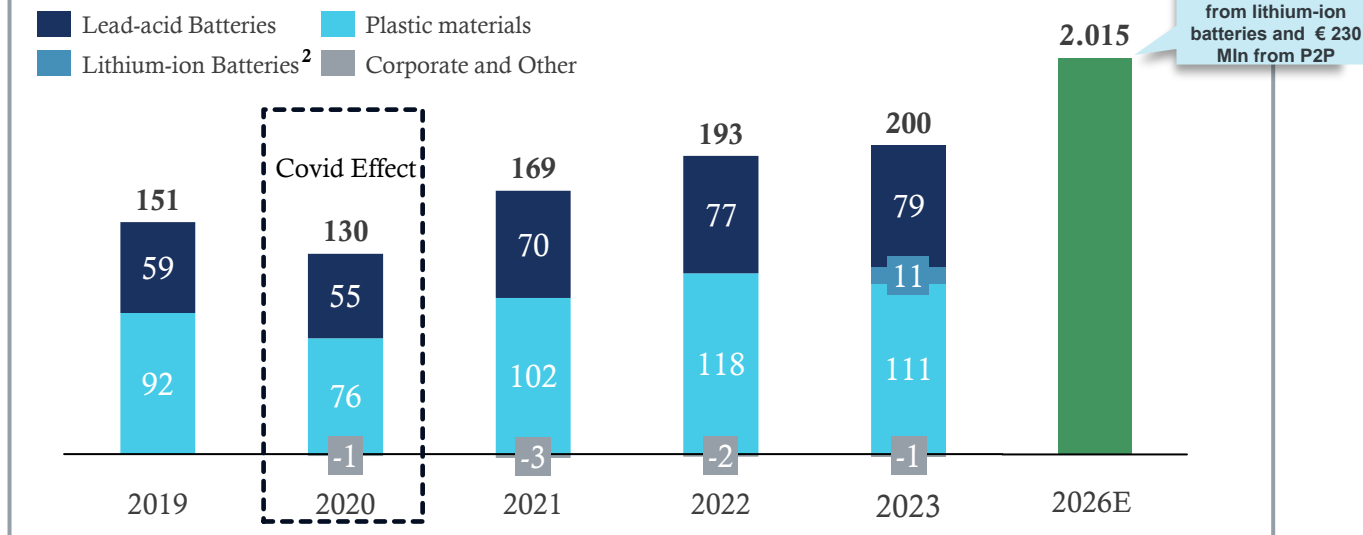




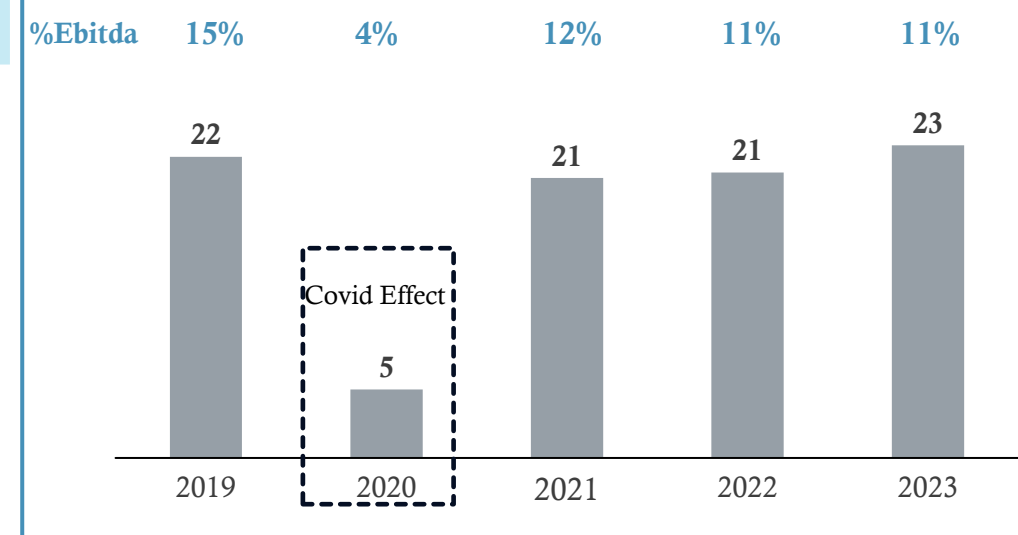
# CONSOLIDATED KEY ECONOMICS AND FINANCIALS

(€M)

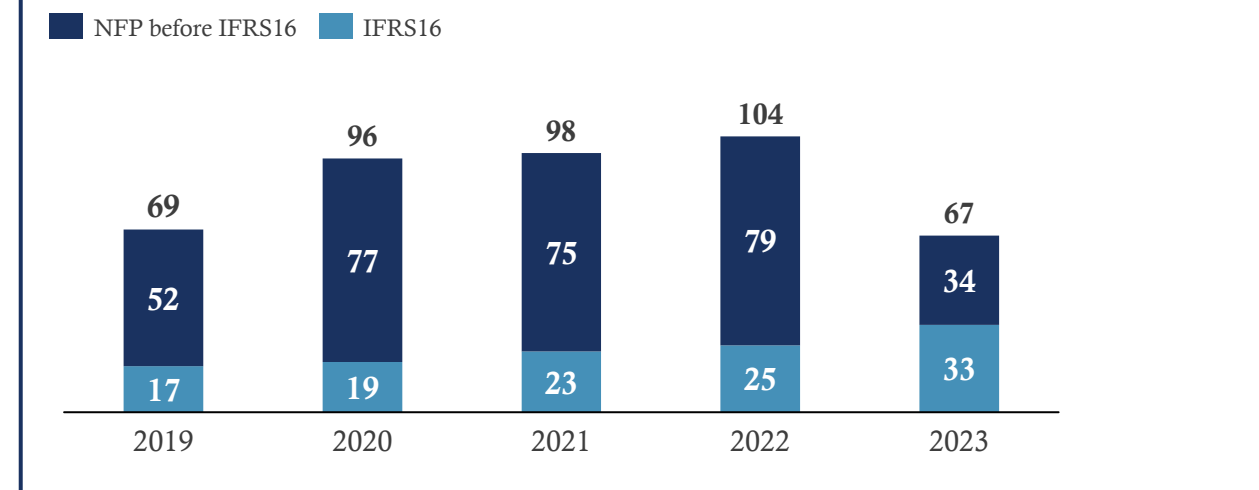
## Revenues<sup>1</sup>



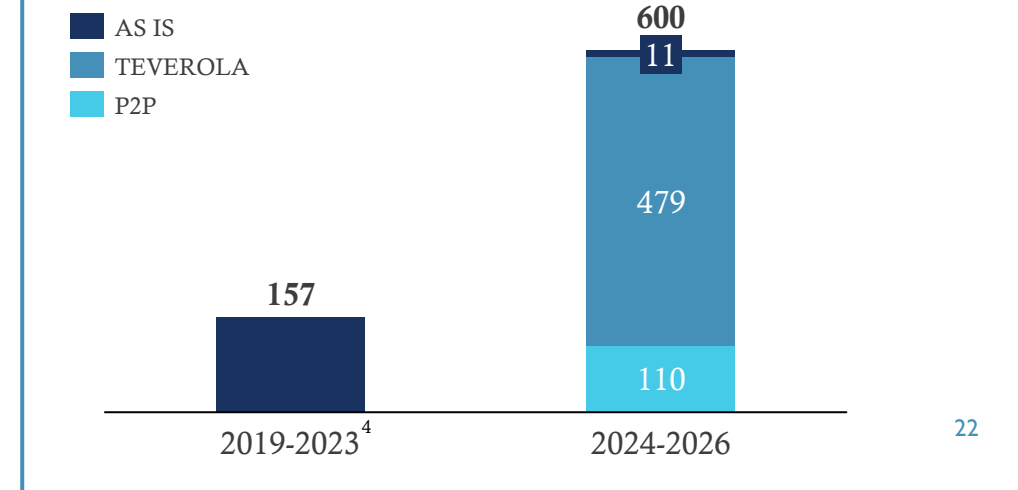
## EBITDA adj<sup>3</sup>



## Net Financial Position



## CUMULATED CAPEX



<sup>1</sup> Includes Revenues, income and internal works

<sup>2</sup> Related to Residential Storage (Li-Home)

<sup>3</sup> Includes non-recurring items related to the higher energy costs

<sup>4</sup> Comprehensive of € 8 mln Capex IFRS

## BUILDING GREEN COMPANIES FOR A BETTER TOMORROW

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