



# Achieving the full circular potential of aluminium

Meeting with DG ENVI, Mr Saudaskas

10 December 2020

# ／ Our key message today

In the context of the EU Green Deal and the new Circular Economy Action Plan, the aluminium industry can deliver:

- More than double the amount of post-consumer aluminium available for recycling by 2050, from 3.6 million tonnes per year today to 8.6 million tonnes.
- 50 % of the demand for aluminium in Europe could be supplied through post-consumer recycling, compared to 20% today.
- Maximising the use post-consumer aluminium scrap = limiting the amount of imported carbon intensive primary aluminium
- Recycling can contribute to CO<sub>2</sub> savings of 46 % per year in 2050

## We need:

- Legislative framework
- Incentives to investment in recycling activities and R&D
- Cross industry collaborations

# Recycling aluminium in Europe

- Around 220 plants (remelting + refining)
- Ca. 12.5 Mio tonnes Installed capacity (70% for remelting and 30% for refining)

- To enhance its strategic autonomy, Europe should **preserve its aluminium primary production and further boost its recycling capacity.**

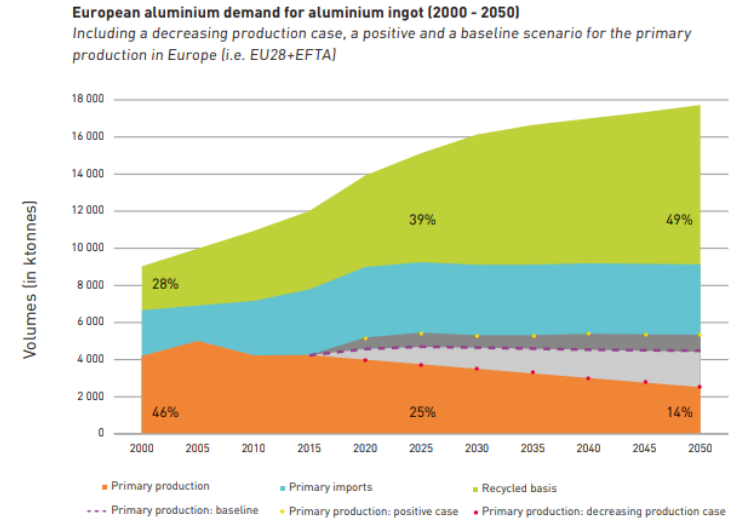
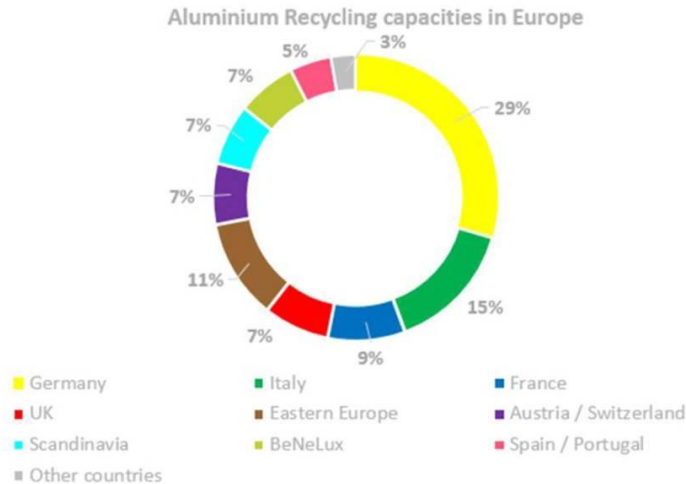


Figure 2: Aluminium recycling capacities in Europe (Source: European Aluminium Statistics)

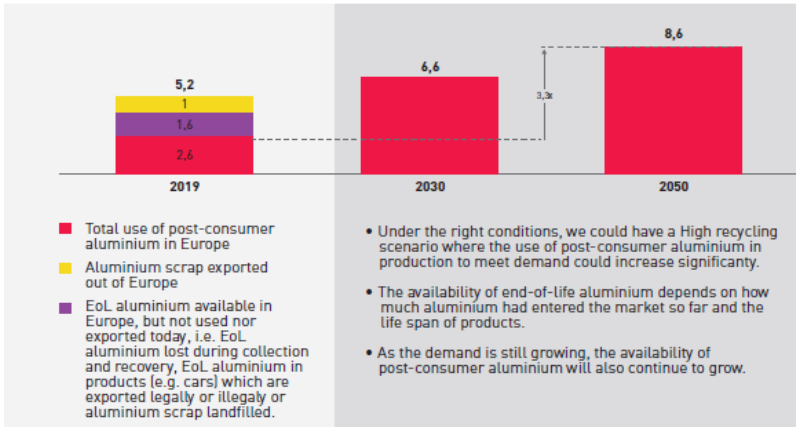
# Boosting the circular systems

**Figure 3: Total use of post-consumer aluminium by 2050**

Mton aluminium in year 2017, 2030, 2050

Source: CRU data - 2019.

Mt end-of-life aluminium, 2019, 2030 and 2050



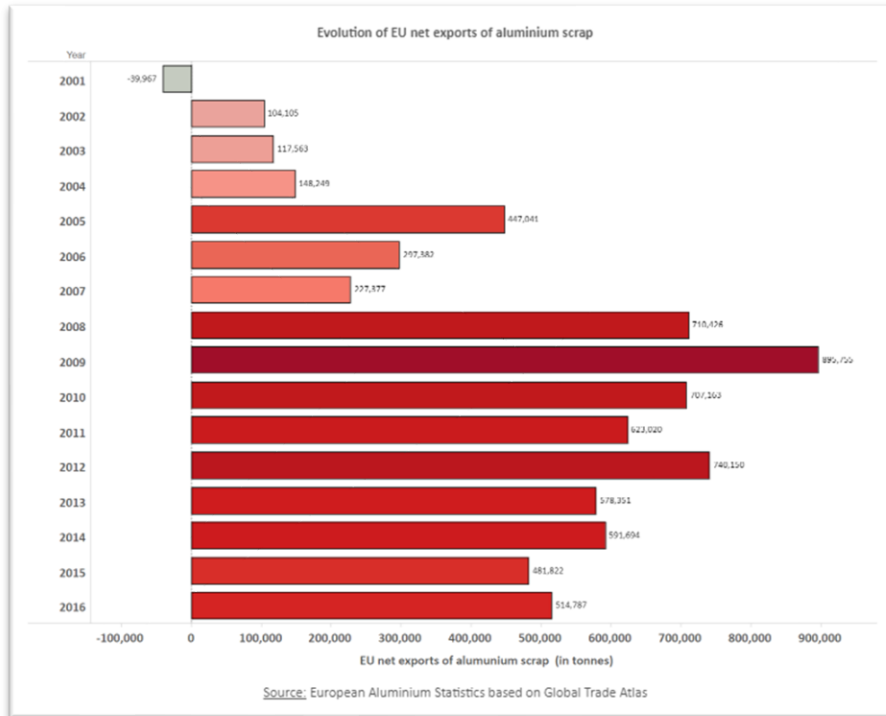
## Main challenges today:

- 1 Mt of aluminium scrap are exported every year
- 4 million of end-of-life vehicles are unaccounted for
- Some countries have relatively low packaging recycling rates
- Landfilling still a solution in some countries
- Need to address informal can collection



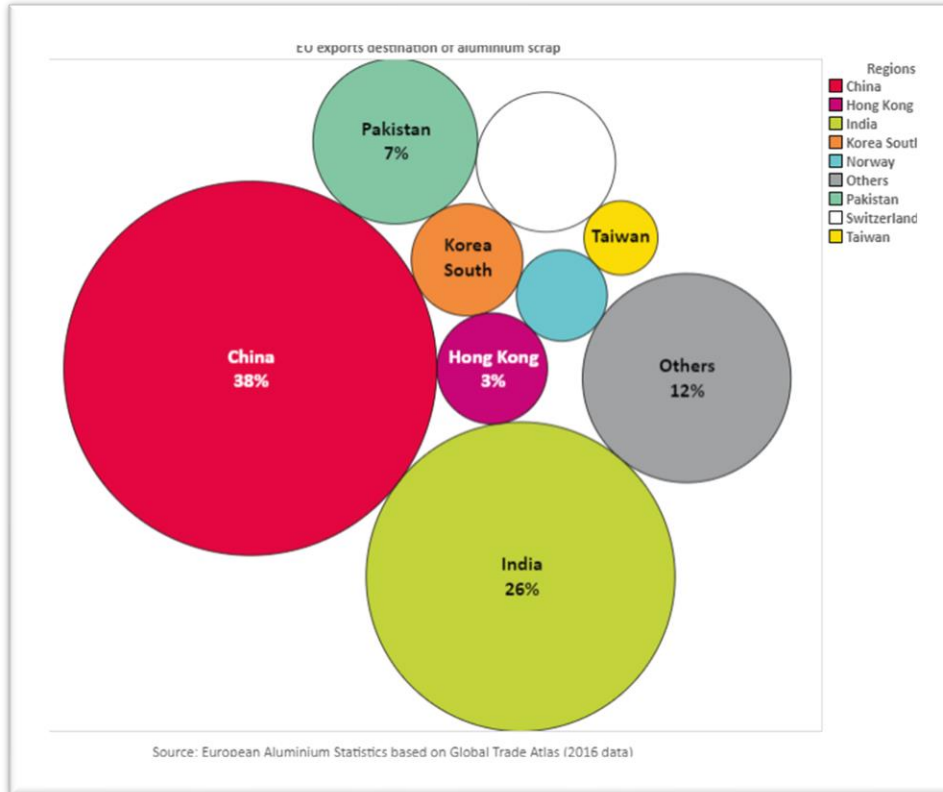
# Policy Recommendations

# ／ The EU is a net exporter of aluminium scrap since 2002



- High export levels of scrap represent missed opportunities to:
  - *Develop further the recycling industry in the EU*
  - *Successfully transition towards the circular economy*
  - *Decrease emissions*

# 80% of the aluminium scrap exports go to Asia



- 2016: EU exported about **941 ktonnes of scrap**
- More than **80%** of this scrap headed to Asia (38% to China and 27% to India)
  - *EU- equivalent standards on standards for environment and safety cannot be guaranteed*

# ／ How to address the export of scrap?

## Our recommendations for the Waste Shipment Regulation

- Simplification of the Notification Procedure
- Update of the European Waste Catalogue (missing green listed code)
- Level-playing field and equivalent conditions for exported waste
- Increasing the size of the testing samples to facilitate innovation



# ／ Moving from “good to great” in our main markets



- Intelligent dismantling of vehicles
- Cast and wrought aluminium is recycled in closer loops
- Better statistics and reporting of end-of-life cars by Member States

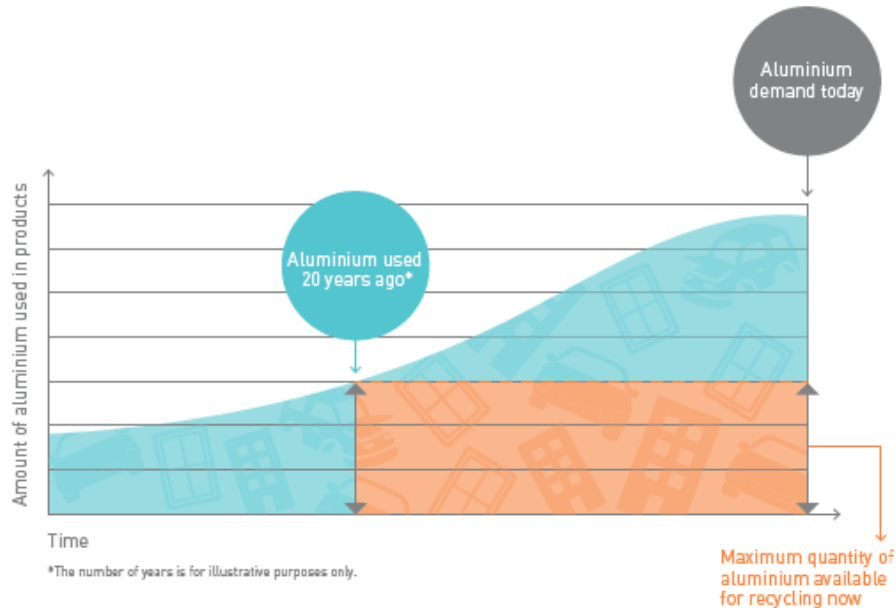


- Striving for 100% recycling of beverage cans
- Fair and transparent recovery systems for aluminium packaging
- Additional investments for more and better collection and sorting technologies



- Separate collection of various aluminium product types on site: extrusion-based vs sheet-based
- Better scrap preparation to separate non-aluminium parts
- Recycling in extruded or rolled products

# End-of-life recycling or minimum recycled content targets?



- Focusing on end-of-life recycling is the best way to maximise the scrap availability. Europe should incentivise investments into recycling capacities and capabilities to support our industry in achieving a full circularity for all products containing aluminium
- Minimum recycled content targets do not give the right incentive to increase recycling of aluminium applications with a long lifespan and growing market

# ／ Packaging – Review P&PWD, new targets

- **Our top priorities for the review of the Packaging & Packaging Waste Directive**
  - No general reduction targets (but address over-packaging)
  - No mandatory Recycled Content percentages for all materials, GPP to be based on LCA's
  - Harmonised and extended separate collection systems, balanced Deposit Return Systems, phase out landfilling asap;
  - Fair and transparent eco-modulated EPR fees
  - Introduce extra code for used aluminium packaging waste in the EU Waste Catalogue: split 150104 (metallic packaging waste) into direct codes for aluminium and steel (no subcodes!)
- **Aluminium will deliver on the new and separate recycling targets for aluminium packaging:**
  - Extension of the PMD (yellow bin / blue bag) systems with (laminated) foil and other related aluminium items;
  - Better collection and sorting – extra investments in Eddy Current, induction-based and robot sorting pays off due to the high scrap value;
  - Include the (cleaned) aluminium recovered from IBA (incineration bottom ashes) in the recycling statistics;
  - Reasonable EPR fees – address the issue of 'problematic' packaging items and stimulate additional pyrolysis treatment to address these items.

# / ELV directive

European Aluminium top priorities for the review of the ELV Directive:

- There is no need for minimum recycled content rates for materials like aluminium
- Well proven aluminium solutions that can combine the goals of making a vehicle lighter AND fully and economically recyclable already exist
- Design for recycling and post shredder separation technologies should be incentivised further
- The EU must act to get a better understanding of where the End-of-Life Vehicles of unknown whereabouts end up. The EU must also take swift action against any illegal shipment or treatment of End-of-Life Vehicles

## **Supporting materials:**

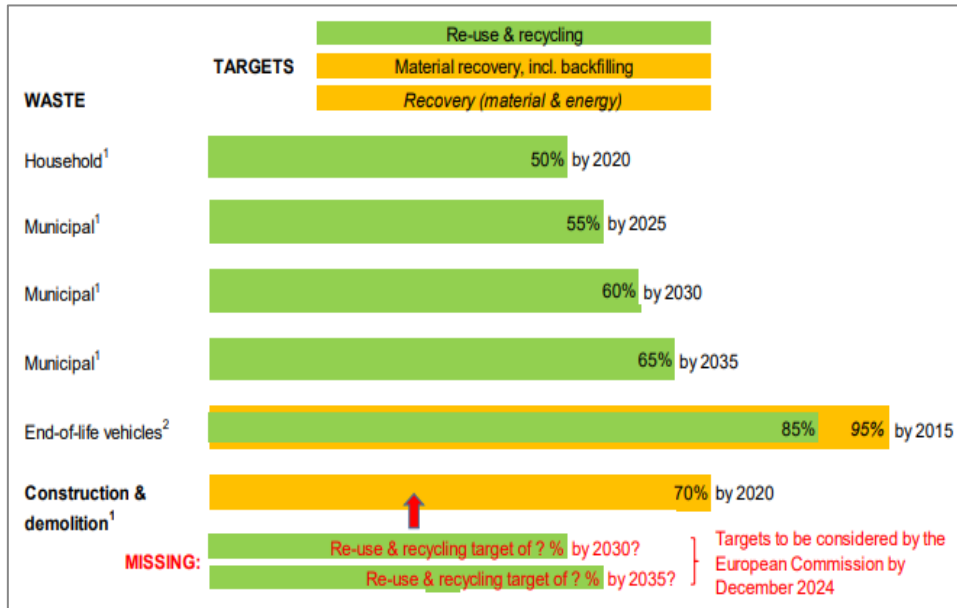
Full position paper available at this [link](#)

Video on aluminium recycling from ELVs at this [link](#)

Infographic on aluminium recycling from ELVs at this [link](#)

# Construction and Demolition Waste

## Setting reuse and recycling target for the whole C&DW flow



- The problem when only recovery targets are set, is that waste that is used for backfilling and not re-used or recycled further, can be taken into account by Member States to reach their objective equally to waste that is actually re-used or recycled, such as metal scrap. **This is unfair for metals.**
- The EU should set a 'Re-use and recycling' target for the whole Construction and Demolition waste flow, the only waste flow for which such target does not exist today.
- The EU should promote separate collection of various aluminium product types on site (extrusion-based vs sheet-based), avoid that building products scraps are mixed with other scrap flows and ensure that collected aluminium is recycled in Europe.

See our position paper [here](#)



# Questions? Contact us!

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EUROPEAN ALUMINIUM

# European Aluminium in a snapshot

**80+**

members

approx. **600** plants in  
30 European countries (EU 28,  
EFTA and Turkey)

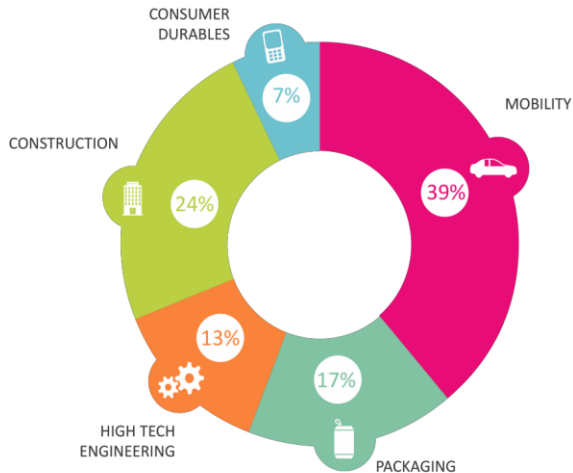
**1** million + direct and  
indirect jobs across Europe's  
value chain



Recyclability

**5%** of  
original energy  
consumption

An innovative value chain serving EU key markets



Europe produces  
**16%**  
of worldwide aluminium

**100%**  
Permanent material

Aluminium properties do  
not change during use and  
following repeated  
recycling into new products

**75%** of  
all aluminium  
ever produced is  
still in use today

**90%**  
of aluminium is  
recycled in  
construction and  
automotive in  
Europe

# / Aluminium is fit for circularity



- **Recyclability:** Aluminium recycling rates are among the highest compared to other materials: in Europe recycling rates are over **90 %** in the automotive and building sectors, and **75 %** for aluminium cans.
- **Durability:** Aluminium products can have a long lifespan e.g. **50 years** in construction and **15 years** in transport.
- **Energy bank:** the aluminium recycling process saves **95%** of the energy needed to produce the primary metal.
- **Permanent material:** aluminium can be **recycled multiple times** without losing its original properties.