



**Aluminium in
circular economy**

8 June 2017

aluminum

Alumetal at glance

- ⊕ #1 aluminium refiner in CEE and #5 in Europe
- ⊕ Strategic goal to become leading aluminium refiner in Europe with 210k tons sales in 2018
- ⊕ 159k tons volume sales in 2016 and 233k tons of production capacity from 2017 (three production plants in Poland and one in Hungary)
- ⊕ Completion of greenfield project in Hungary in 4Q 2016 and beginning of master alloys expansion in 2H 2016 (completion in 1H 2018)
- ⊕ 90% of volume sales goes to the automotive industry and 60% of total sales is outside of Poland

Aluminium – metal with unique features



Light

Aluminium is a very light metal with a specific weight of 2.7 g/cm³, about a third that of steel



Strong

Aluminium mixed with small amount of other metal can provide the strength of steel without loss of ductility



Long-lasting

Aluminium has natural ability to resist weather degradation, corrosion and decay – much better than any other materials



Corrosion resistant

Aluminium naturally generates protective oxide coating and is highly corrosion-resistant



Very ductile

Aluminium is ductile and has a low melting point and density so that it can be processed in a number of ways



Perfect conductor

Aluminium is an excellent heat and electricity conductor - this made aluminium the most commonly used material in major power transmission lines



Impermeable & odourless

Aluminium foil, even when it is rolled to only 0.007 mm thickness, is still completely impermeable and protects from any aroma and taste substances out

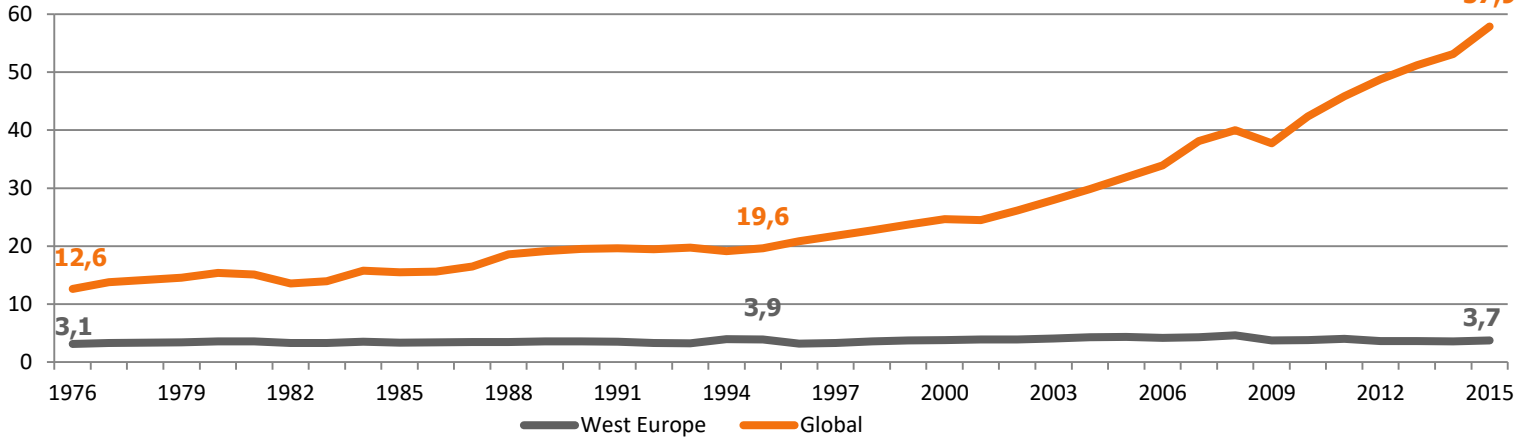


Fully recyclable

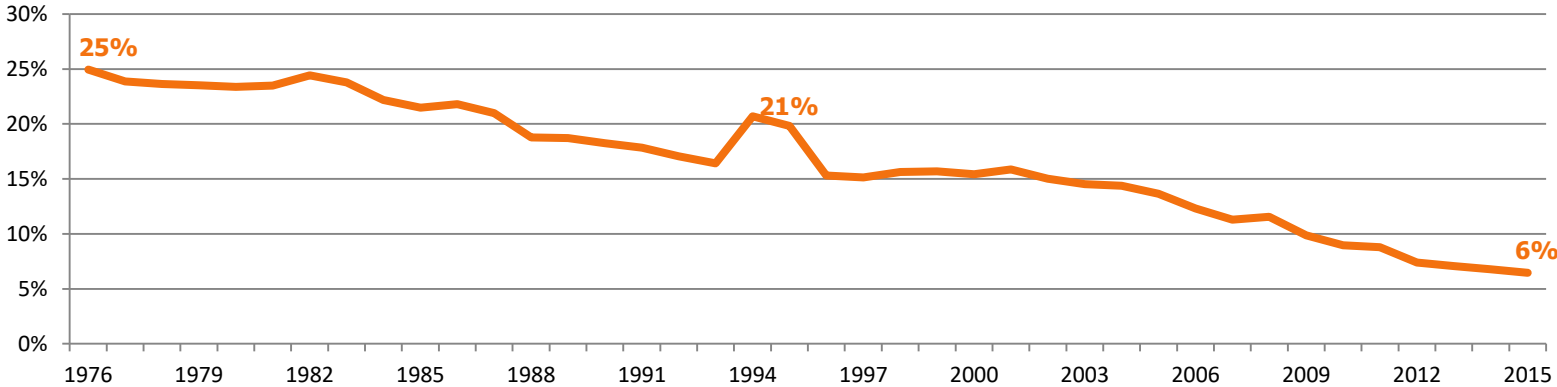
Aluminium is fully recyclable with no downgrading of its quality and physical and chemical characteristics

Primary aluminium production

Global primary aluminium production in mn tons



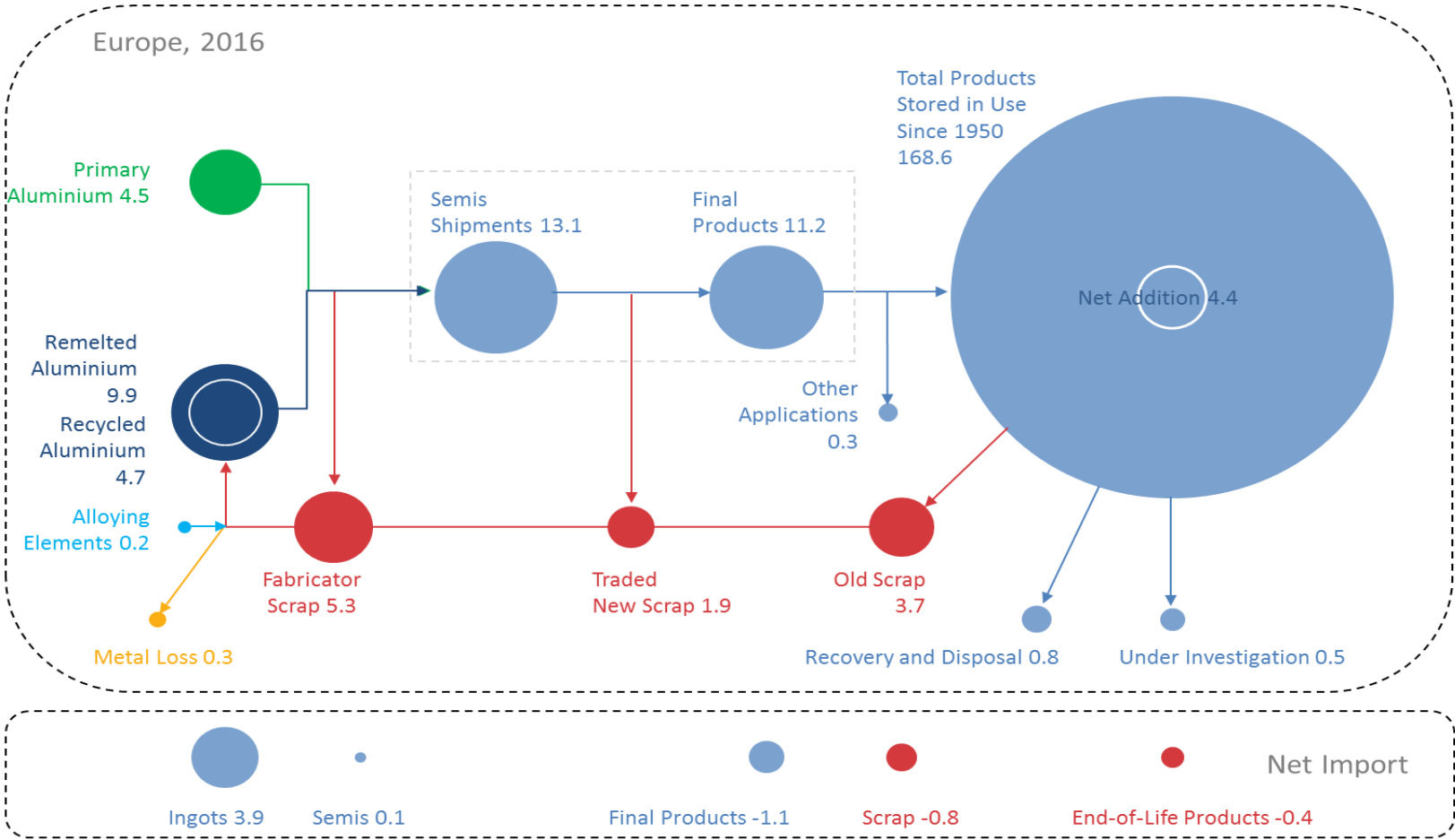
Western Europe share in global production



Source: Eurostat



Aluminium mass flow in Europe in 2016



Source: IAI



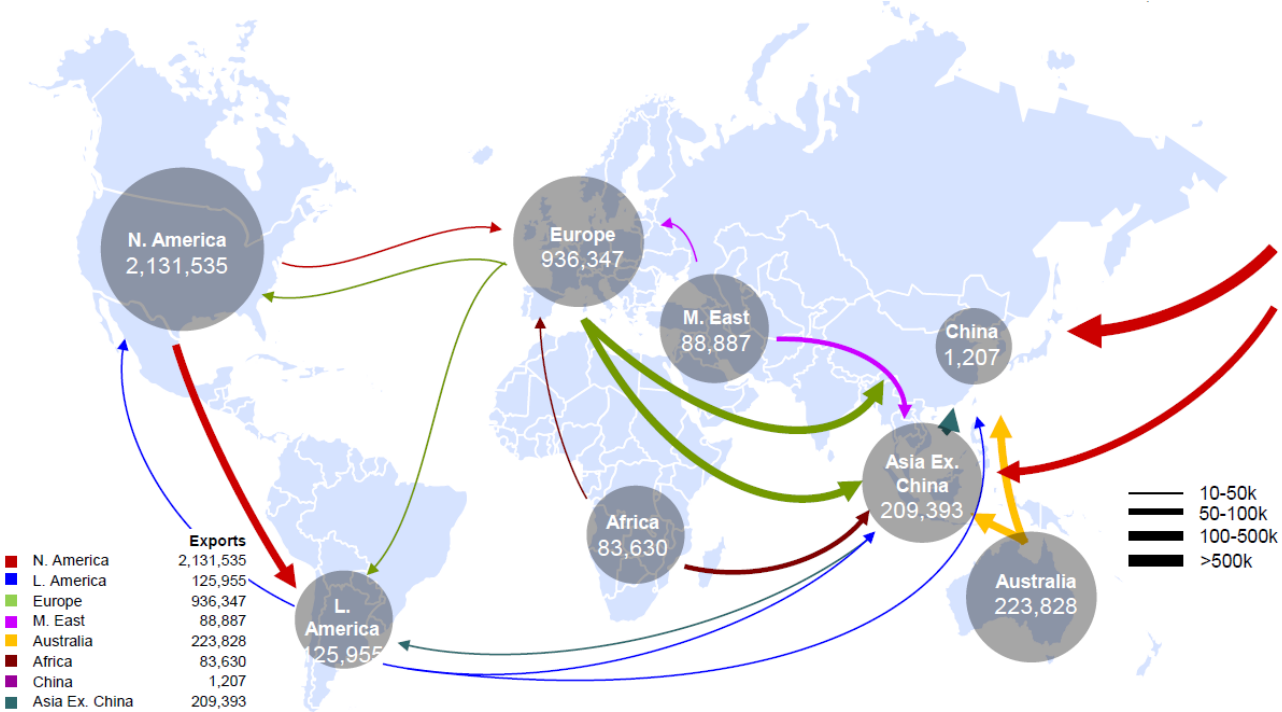
Primary aluminium & scrap consumption in Europe

	2014	2015	2016
Old scrap	4,3	4,4	4,5
New traded scrap	1,8	1,8	1,9
Scrap generation in Europe	6,1	6,2	6,4
Scrap net export	-0,8	-0,8	-0,8
Traded scrap consumption in Europe	5,3	5,4	5,6
Traded scrap	5,3	5,4	5,6
Fabricator (internal) scrap	5,1	5,1	5,3
Total scrap consumption in Europe	10,4	10,5	10,9
Primary aluminium production	4,2	4,4	4,5
Primary aluminium net import	4,4	3,1	3,9
Primary aluminium consumption in Europe	8,6	7,5	8,4

Consumption of metal, semis and final products in Europe

	2014	2015	2016
Total scrap (internal & traded) consumption in Europe	10,4	10,5	10,9
Primary aluminium consumption in Europe	8,6	7,5	8,4
Alloying elements	0,1	0,2	0,2
Metal loss	-0,2	-0,3	-0,3
Total metal consumption in Europe	18,9	17,9	19,2
Semis production	12,4	12,7	13,1
Semis net import	0,0	0,2	0,1
Semis consumption	12,4	12,9	13,2
Final products production	10,7	10,9	11,2
Final products net export	-0,9	-1,0	-1,1
Final product consumption	9,8	9,9	10,1
Aluminium in use at the end of the year	160,0	164,3	168,6

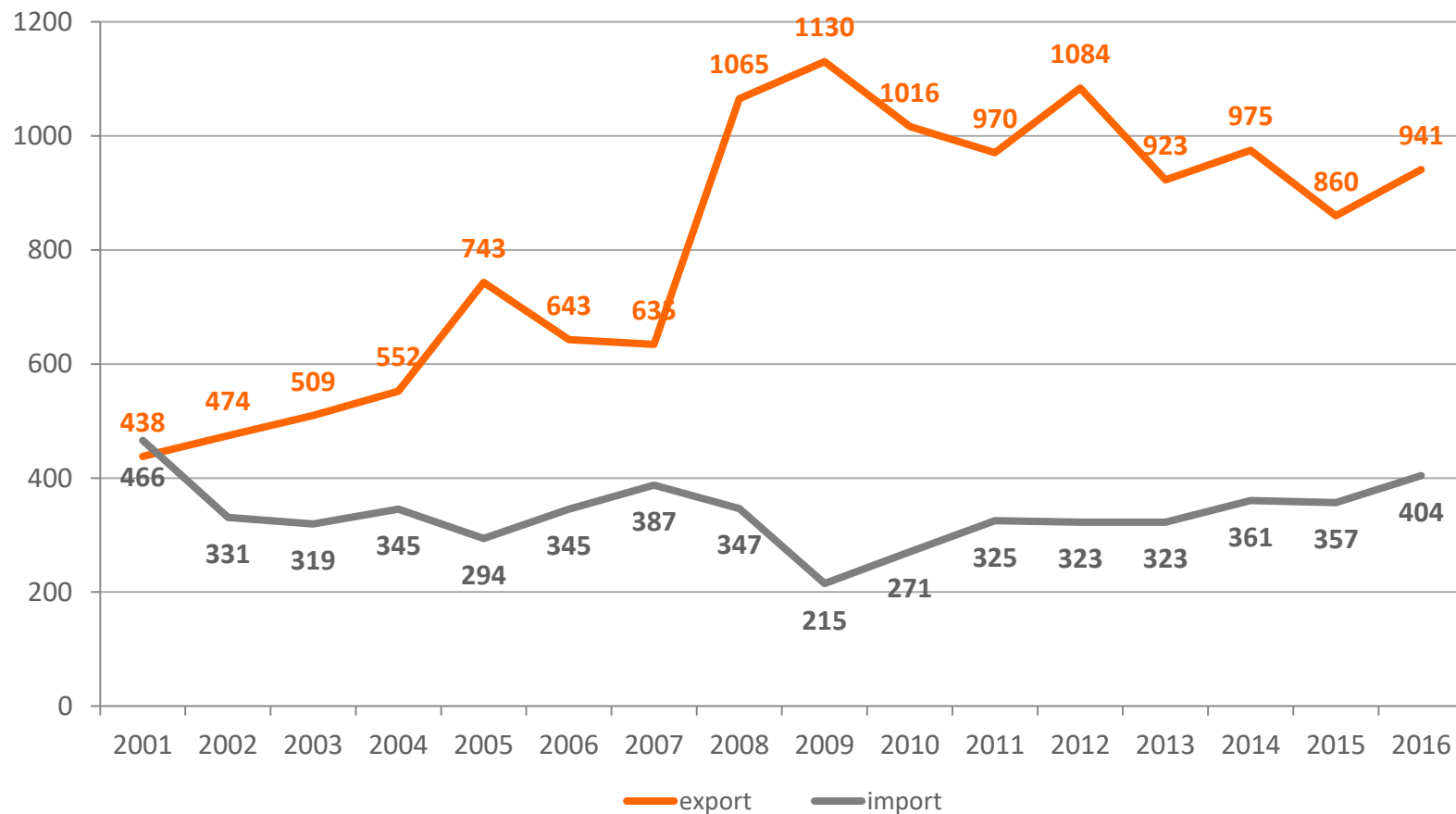
Aluminium scrap export in k tons in 2011



Source: CRU

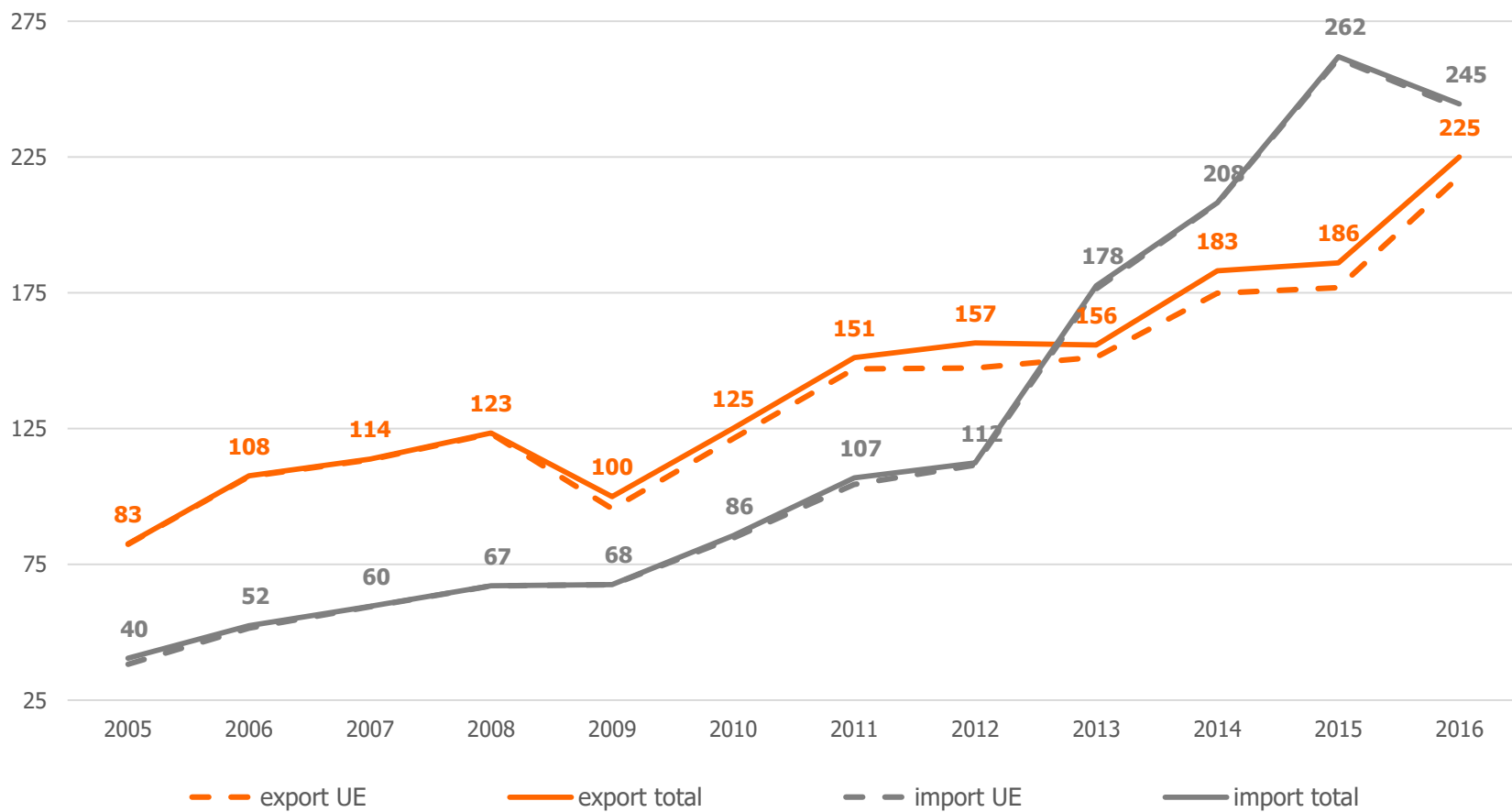


Aluminium scrap export/import from/to UE k tons



Source: Eurostat

Aluminium scrap export/import from/to Poland k tons



Source: Eurostat