New study shows aluminium content in cars to increase by up to 30%

7 September 2016 – A Ducker Worldwide study forecasts the aluminium content in cars to increase by up to 30% over the next ten years. This surge is mainly from rolled and extruded products, where Auto Body Sheet leads the growth with an expected increase of 110% over the same period. The growth is largely attributed to aluminium’s role in lightweighting cars, thereby contributing to low emission mobility.

The amount of aluminium used in cars is expected to see a significant increase by 2025, according to a study recently published by consulting and research firm Ducker Worldwide. The study, commissioned by European Aluminium, predicts that the aluminium content of cars produced in Europe could reach nearly 200 kg per vehicle by 2025, up from 150 kg today.

“We expect the aluminium content in cars to continue its growth trajectory by as much as 30% in the next ten years,” stated Wouter Vogelaar from Ducker Worldwide. “Although we find total content growth in all forming processes, rolled and extruded products have been particularly identified as replacing steel in many instances for products used in body closures and body structures. For example, we expect the use of Auto Body Sheet to double over the next decade.”

Carmakers’ preference for aluminium is largely linked to its lightweight nature, contributing to CO2 reduction. Due to its inherent strength and its excellent ability to absorb crash energy, well-engineered aluminium car parts can be both safer than steel and up to 50% lighter. Lighter cars substantially contribute to reducing CO2 emissions and improving fuel efficiency. In fact, using 200 kg of aluminium in a car could reduce CO2 emissions by up to 16 grams per kilometre travelled. With the 2014 average at 123g/km, increasing the aluminium content in cars could play a significant role in enabling the EU to achieve its target of 95g/km by 2021.

“Without lightweight cars there can be no energy efficient mobility. Aluminium is therefore an integral part of the EU’s transition to a low carbon society,” said Dieter Höll, Chairman of the Automotive & Transport Board at European Aluminium. “We hope the European Commission’s strategy to decarbonise transport will stress the benefits of lightweight materials such as aluminium.”

Ducker Worldwide also found that the share of rolled products grew significantly in the last four years due to the increased penetration rate for body closures and body structures. The share of forgings and extrusions in the total aluminium consumption remained relatively stable.

The study includes data from automotive companies and suppliers, European Aluminium member companies and past Ducker Worldwide data. It is based on a detailed analysis of the use of aluminium castings, extrusions, forgings and sheets for 33 component groups across a sample of 93 car models, subsequently extrapolated to the entire 2016 production forecast in EU 28.

The public summary can be found here. The full report (140 pages) is available to members of European Aluminium’s Automotive and Transport Market Group. For more information please contact Patrik Ragnarsson (ragnarsson@european-aluminium.eu).

About European Aluminium:
European Aluminium, founded in 1981, is the association that represents the whole value chain of the aluminium industry in Europe. We actively engage with decision-makers and the wider stakeholder community to promote the outstanding properties of aluminium, secure growth and optimise the contribution our metal can make to meeting Europe’s sustainability challenges. Through environmental and technical expertise, economic and statistical analysis, scientific research, education and sharing of best practices, public affairs and communication activities, European Aluminium promotes the use of aluminium as a permanent material that is part of the solution to achieving sustainable goals, while maintaining and improving the image of the industry, of the material and of its applications among their stakeholders. For further information, please contact: Ani Deal, communications@european-aluminium.eu, +32 (0)2 775 63 76