

The Story of Aluminium in Transport

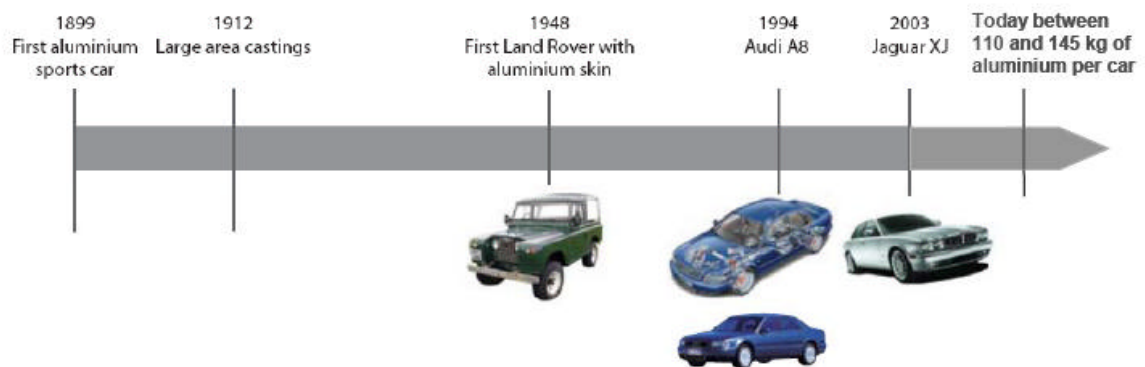
Topic: Solutions

Background Information:

Over the life cycle of any transport vehicle, the use of aluminium results in economic, social and environmental benefits. These three areas are often referred to as the 'triple bottom line'.

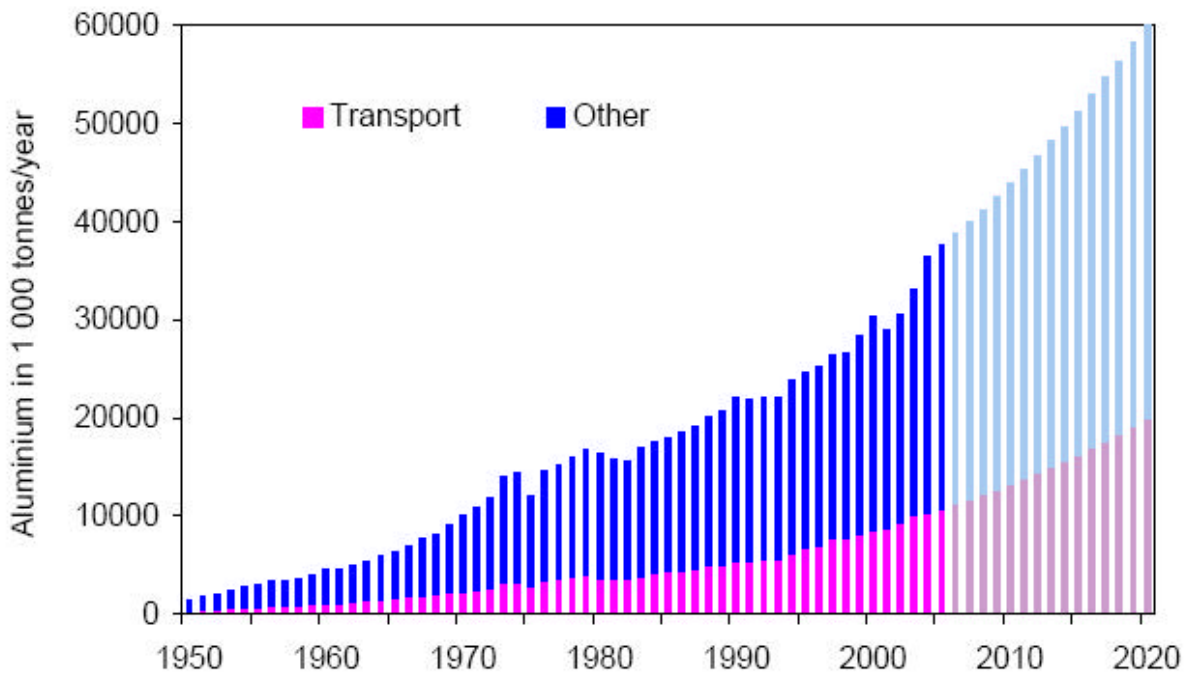
Aluminium is light, durable, endlessly recyclable and it keeps its value and properties once it has been recycled.

As the time-line below shows, aluminium has been used in the transport industry for over a hundred years.



Source: www.autoaluminum.org/images/PDFs/GlobalTransportationSustainabilityPaper.pdf

The use of aluminium in the transport industry and in other areas has rapidly increased since the 1950s. Check out the graph below which shows this increase and makes predictions about the use of aluminium in the future.



Source: www.autoaluminum.org/images/PDFs/GlobalTransportationSustainabilityPaper.pdf

In 2000, transport was responsible for greenhouse gas emissions of about 7 600 millions tonnes. That's a lot of emissions! Studies concluded that about 660 million tonnes of greenhouse gas annually could be saved if all transport units, including road vehicles, trains and aircraft were replaced by the same number of lightweight vehicles.

Questions:

- The pink on the graph above indicates use of aluminium in transport, while the blue indicates other uses. Make a list of other uses of aluminium.
- Explain the possible reasons for increased use of aluminium.
- The graph continues into the future showing projected use of aluminium until the year 2020. Consider the positive and negative environmental implications of this. What steps must individuals, industry and governments take to ensure the sustainability of the use of aluminium.

Curriculum Links:

English: Writing, Reading

Society and Environment: Investigation, Communication & Participation, Resources

Science: Natural and Processed Materials

Mathematics: Chance and Data

Values:

5. Environmental Responsibility