GESAMTVERBAND DER ALUMINIUMINDUSTRIE e.V.

→ Aluminium - a contract between generations

Did you take the car or the train to go to work today? Did you then think about, that your grandmother possibly made your milk-pap in an aluminium pan and that the very same aluminium is today used in the engine block of your car, which guarantees your mobility? And that it is a good bet that your grandchildren will travel on a train or in an aircraft that again contains the same metal?

Behind the universally accepted blueprint for "Sustainable Development" lies the general requirement that the use of resources today should not create problems for future generations.

Exactly in this context Aluminium offers quite a lot in particularly if compared with other materials.

Longterm availability

To manufacture a given number of vehicles, a certain amount of aluminium is needed today. Let us say that for 100 vehicles, 100 units of aluminium are needed. This defined quantity can be called the "utility units". Let us assume an average life of the car of 10 years, and that during recycling - including the material collection - a material loss of 10 percent occurs.

From this it follows:

- A total of 996 utility units will be obtained from the material used for today's 100 utility units.
- The last utilisation from the material used today will take place in about 500 years.

Only this multiple-period consideration makes it clear that the original resource utilisation can satisfy needs to an extent ten times greater than is apparent from a one-period stand-point.

Aluminium - the ideal material for recycling

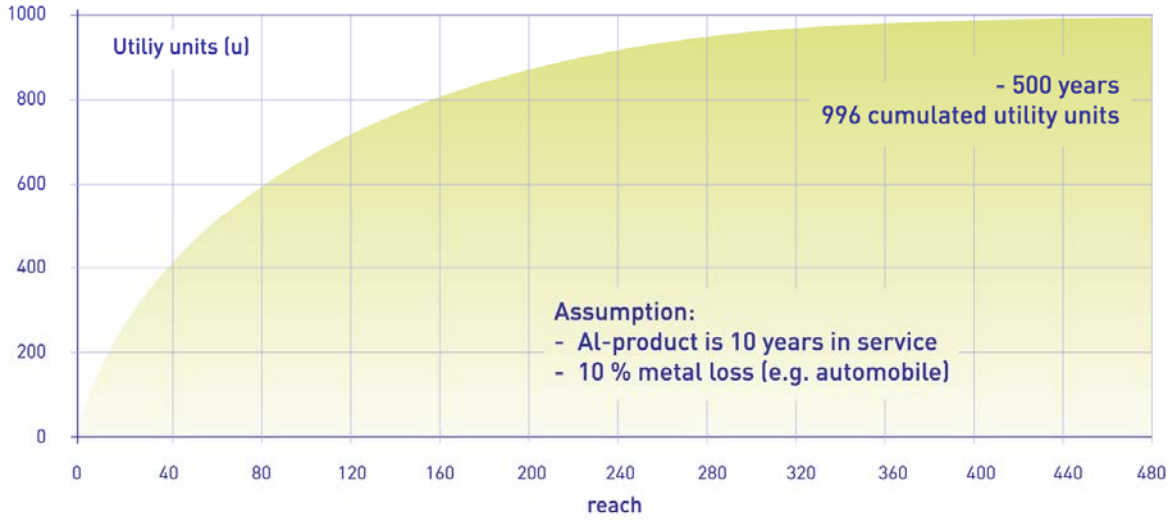
Which resources or raw materials would have relative advantages when considered from such a generation-bridging point of view?

Those non-renewable resources of which the following are true:

→ Geologically high availability,

→ The greatest possible re-utilisation potential,

The use of aluminium today already establishes benefits for future generations.



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→ Low material losses when re-used,
→ Predominantly used for long-life commodities.

All of the above are true of aluminium to an outstanding extent:

→ Aluminium makes up 8 percent of the earth's crust and is the third most abundant element.
→ With today's boundary conditions, is availability for first extraction will last at least 200 years.
→ It is a material that can be used again and again.
→ Material losses during recycling are relatively low.
→ Worldwide, over 60 percent of aluminium is used for commodities with a life of more than 10 years, in products, among others, in fields such as mechanical engineering, transport and building.

Tomorrow's generations benefit from using the aluminium used today

This results in an interesting question concerning the distribution of energy demand and emissions. Is it correct to distribute all impacts to the first 100 utility units, or would it not be correct to distribute the impacts also to further utility units?

One thing is clear: To calculate emissions completely for a first investment in utility units exclusively in relation to the utility units used by the present generation, as is usual at present, represents an unfair distribution of responsibility to the disfavour of the present generation and to the advantage of future ones. This is because the relatively "harmless" units available later could not be produced at all unless the present initial investment had taken place.

When considered from a generation bridging standpoint, aluminium has much more to offer than is often perceived today. The light metal produced today is already earmarked to satisfy needs such as safety and mobility in the world of tomorrow. Aluminium is a contract between and "for future generations".

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