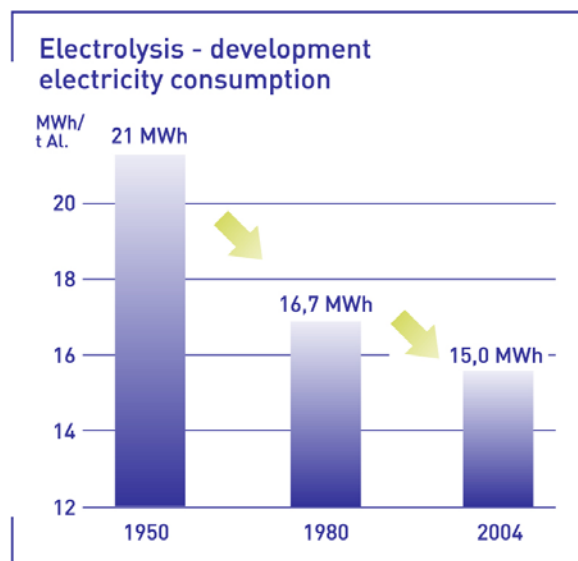


## → Efficient use of resources to counter the "intensity of energy use" argument

The amount of energy consumed (the intensity of energy use), e. g. in the production of aluminium, is in itself not ecologically relevant.

It is more important that the energy needed to produce and then use a product (e. g. a car) be used efficiently in fulfilling the desired purpose (in this case, satisfying the need for mobility).



The use of energy in the production of aluminium is achieved while conserving resources and leads to energy savings during the useful life of aluminium products:

- World-wide, 55 percent of the energy used to produce aluminium is supplied from hydro-electric power, a renewable source of energy. The aluminium industry thus relies very heavily on CO<sub>2</sub>-free sources of energy.
- The fact that energy represents a large part of the costs associated with primary alumin-

ium production means that producers automatically have a vested interest in minimising electricity consumption. This has led to a saving of almost 30 percent in recent decades.

- Within the scope of a voluntary commitment made by the non-ferrous metals industry, the German aluminium industry has agreed to reduce the specific energy consumption by a further 22 percent by the year 2005 (reference year: 1990).
- The lightness of aluminium products contributes to fuel savings and reductions in emissions. Air, rail and road transport all benefit from energy savings, both directly and as a result of aluminium packaging or building materials being lighter than other materials.
- Aluminium products have a longer life and require less maintenance than other building materials, and thus conserve energy and resources.
- With packaging, the good thermal conductivity of the aluminium leads to energy savings when cooling drinks, for example, or heating up ready-made meals.
- Furthermore, the energy first used to produce the metal is not lost. It is tied up in the products and is "reactivated" during recycling. The amount of energy needed for recycling is up to 95 percent lower than for the equivalent primary aluminium production. Moreover, one can recycle aluminium as often as one likes without any deterioration in quality.

The amount of energy consumed, e. g. in the production of aluminium, is in itself not ecologically relevant. It is more important that the energy needed to produce and then use a product (e. g. a car) be used efficiently in fulfilling the desired purpose (in this case, satisfying the need for mobility). A reduction in the energy consumption is of inherent concern to the aluminium industry, even just for economic reasons.

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