



A SUSTAINABLE PARTNER

STAINLESS STEEL V.S ALUMINIUM





A SUSTAINABLE PARTNER



The UN's global goals require us to switch to **sustainable construction** to **reduce climate pressure**. The best and most efficient way to **reduce the CO2 footprint** is to **build more in wood**.

Valutec's dry kilns **enables an increased use of wood**. We constantly strive to **develop** innovative and **sustainable solutions** to further improve our wood dryers and intelligent control systems. Value-creating solutions that make it possible to take advantage of the raw material's full value. In other words, **we believe in wood** and want to help make wood the preferred choice for construction and joinery products.



9.4 ” Adapt industry to make it more sustainable”

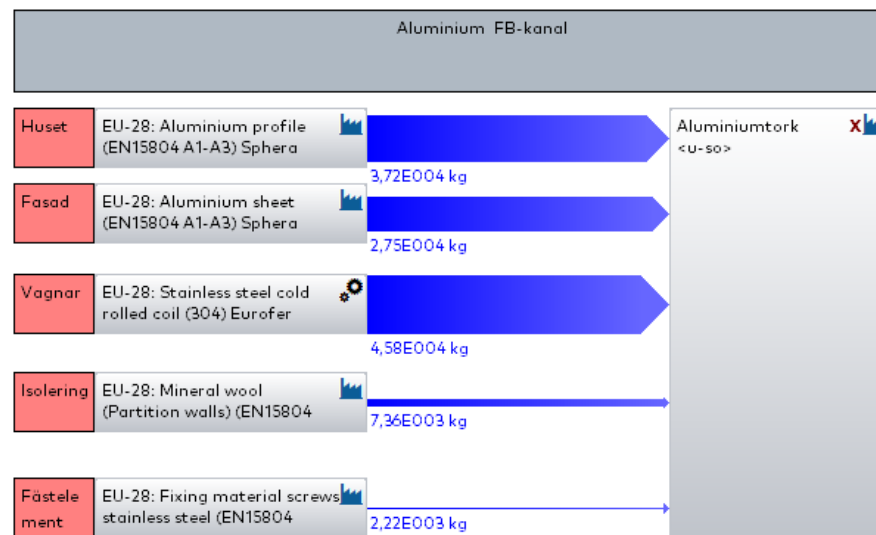
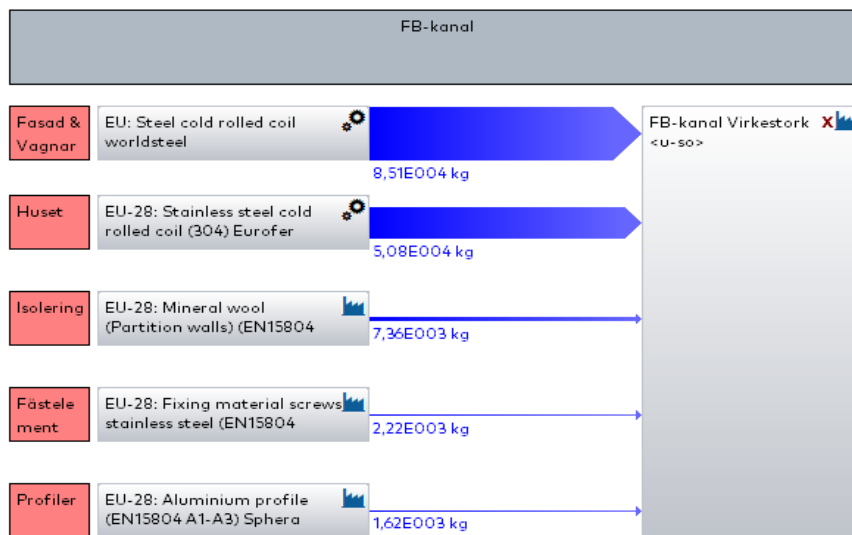
There is sustainability thinking behind Valutec’s materials choices. For example, our kilns are built using stainless steel instead of aluminium to maximise product lifespan and minimize the CO2 footprint. Thanks to our well-designed kilns, heat recovery and smart control systems, we offer a sustainable drying process with minimal energy consumption and maximum value yields.

9.5 ”Enhance scientific research & upgrade the industry’s technological capabilities”

Every year, five per cent of Valutec’s net sales goes to R&D, which usually takes place together with the industry and/or a technological Institute.

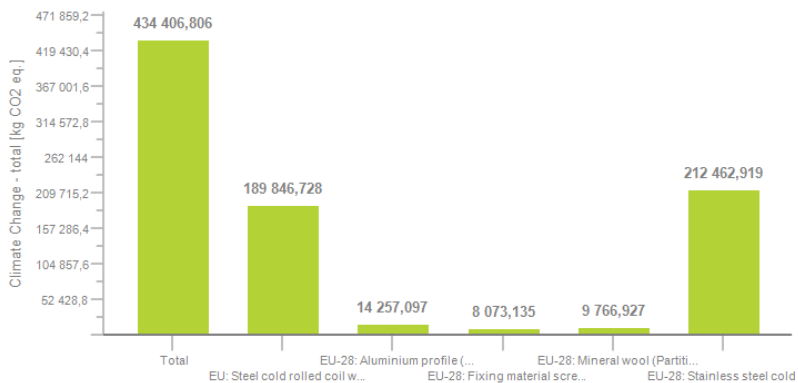


VALUTEC FB-KANAL SS vs ALUMINIUM



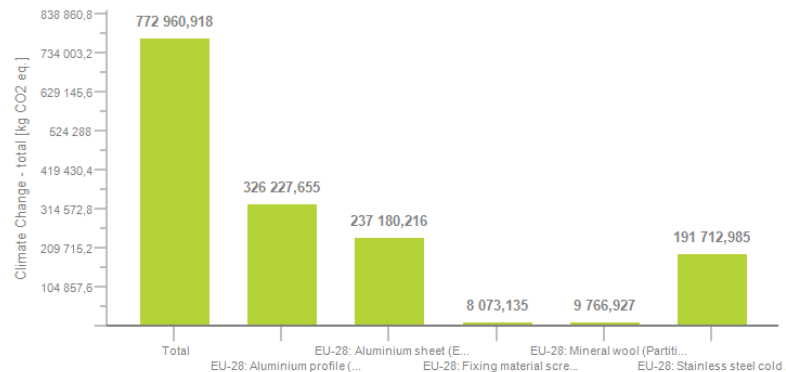
VALUTEC FB-KANAL SS vs ALUMINIUM

Climate Change total



Stainless steel,
lifespan >40years

Climate Change total



Aluminium,
lifespan <20 years

100% VALUTEC RECYCLED FB

CO2 per material:

Steel 172 361kg*

Aluminium 1 141kg**

Mineral wool 9 767kg

Total = 183 tons CO2e***



*Based on Stena Recycling: 58% of CO2 is saved with recycled steel compared to primary

**Based on Stena Recycling: 92% of CO2 is saved with recycled aluminium compared to primary

*** Following EF 3.0 Climate Change

50% VALUTEC RECYCLED FB

CO2 per material:

Steel 172 361kg*

86 181 kg virgin – 205 191 kg CO2e

86 181 kg recycled – 86 180 kg CO2e

Aluminium 1 141kg**

571 kg virgin – 7129 CO2e

571 kg recycled – 570 CO2e

Mineral wool 9 767kg

Total = 309 tons CO2e***



*Based on Stena Recycling: 58% of CO2 is saved with recycled steel compared to primary

**Based on Stena Recycling: 92% of CO2 is saved with recycled aluminium compared to primary

*** Following EF 3.0 Climate Change

100% RECYCLED ALUMINIUM FB

CO2 per material (Weight of material in a aluminium dryer was altered to 70% of the steel dryer):

Aluminium 45 077kg*

Steel 83 910kg**

Mineral wool 9 767kg

Total: 139 tons CO2e***

*Based on Stena Recycling: 92% of CO2 is saved with recycled aluminium compared to primary

**Based on Stena Recycling: 58% of CO2 is saved with recycled steel compared to primary

*** Following EF 3.0 Climate Change

50% RECYCLED ALUMINIUM FB

CO₂ per material (Weight of material in a aluminium dryer was altered to 70% of the steel dryer):

Aluminium 45 077kg*

22 539 kg virgin — 286 587 kg CO₂e

22 539 kg recycled — 22 927 kg CO₂e

Steel 83 910kg**

41 955 kg virgin — 99 893 kg CO₂e

41 955 kg recycled — 41 955 kg CO₂e

Mineral wool 9 767kg

Total= 461 tons CO₂e***

*Based on Stena Recycling: 92% of CO₂ is saved with recycled aluminium compared to primary

**Based on Stena Recycling: 58% of CO₂ is saved with recycled steel compared to primary

*** Following EF 3.0 Climate Change

50% RECYCLED VALUTEC FB KILN VS ALUMINIUM

Valutec total: 309 tons CO₂e

Lifespan 40 years: $309/40 = 8$ tons CO₂e/y

Aluminium total= 461 tons CO₂e

Lifespan 20 years: $461/20 = 23$ tons CO₂e/y

15 ton less CO₂e/y with a Valutec FB kiln.



50% RECYCLED VALUTEC FB KILN VS ALUMINIUM

15 tons CO₂e/year equals:

- 2 hectare Swedish softwood*
- 60 flight trips Stockholm-London (return)**
- 5 475 train trips Stockholm-Göteborg (return)***
- 570 kg beef****



*<https://www.skogssverige.se/hur-myckat-co2-tar-en-hektar-mellansvensk-barrskog-upp-under-de-forsta-50-aren-efter-plantering>

**<https://www.icao.int/environmental-protection/Carbonoffset/Pages/default.aspx>

***<https://atmozconsulting.se/2014/10/21/hur-kan-man-visualisera-1-ton-koldioxid/>

****<https://godel.se/blogg/klimatqueen-reder-ut-sa-har-mycket-ar-1-ton-koldioxid/>

50% RECYCLED VALUTEC FB VS ALUMINIUM

CO₂e/m³ dried timber

Valutec total: 309 tons CO₂e

Life span 40 years: $309/40 = 8$ tons CO₂e/y

Life capacity: $40 \times 100\,000\text{m}^3 = 4\,000\,000\text{m}^3$

0,08 kg CO₂e/m³ dried timber

Aluminium total= 461 tons CO₂e

Life span 20 years: $461/20 = 23$ tons CO₂e/y

Life capacity: $20 \times 100\,000\text{m}^3 = 2\,000\,000\text{m}^3$

0,23 kg CO₂e/m³ dried timber



A Valutec FB stainless steel kiln consumes 65% less CO₂e/m³ dried timber!

