

Ecuador: How optimised design in the leather industry can reduce emissions

The production and processing of metals, minerals and other materials is a major contributor to climate change. In fact, according to the International Resource Panel (IRP), it accounts for almost one quarter of the world's greenhouse gas emissions. Going beyond energy efficiency and using materials more efficiently offers both environmental and economic benefits – and it's key to achieving the goals of the Paris Agreement.

97% of leather is used in products

The Ecuadorian company CKG Brand lowers emissions by optimising design, substituting materials and reducing waste. While these are small contributions in the grand scheme of things, the combined efforts of small and medium-sized enterprises play a major role in fighting climate change.



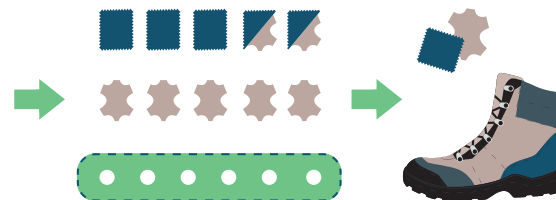
Using less material by design

CKG Brand produces leather shoes, primarily hiking and mountain boots. The small company uses eco-design to reduce material waste and greenhouse gas emissions. By standardising the cut-out shapes of the individual parts, waste is kept to a minimum: **97% of the leather is used compared to 88% in conventional designs.**

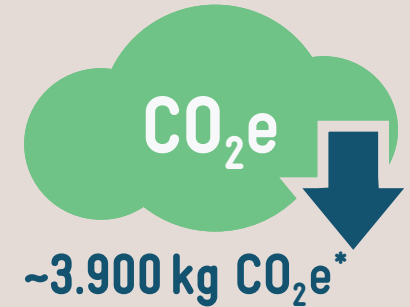


Material substitution

What's more, the company offers mixed designs, where they replace leather with surplus textiles from other industries, such as upholstery covers from the automotive industry. This way, they not only save **30-50% of leather, but also give waste materials from other companies a second life.**



Annual savings through material efficiency



*Equivalent to the greenhouse gas emissions of two return flights from Quito to Brasilia.

In its 2020 report on resource efficiency and climate change, IRP set out seven strategies that public and private sector stakeholders can use to achieve greater material efficiency and foster climate action:



Using less material by design



Fabrication yield improvements



Product lifetime extension



Material substitution



Enhanced end-of-life recovery and recycling of materials



More intensive use



Recovery, remanufacturing & reuse of components

TACKLE CLIMATE CHANGE...

...by making material efficiency part of your climate strategies.

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