

# Argentina: How recycling of material in the construction 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.

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

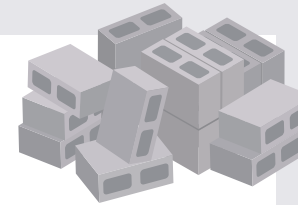


More intensive use



Recovery, remanufacturing & reuse of components

The Argentinian construction industry reduces emissions by adapting the regulatory framework for the widespread use of recycled concrete. While this is a small contribution in the grand scheme of things, the combined impact of climate strategies plays a major role in addressing climate change.



Enhanced end-of-life recovery and recycling of materials

The construction sector is one of the most resource-intensive economic sectors in the world and consumes large quantities of raw materials such as stone, gravel, sand and clay. Their extraction has a negative impact on nature and the landscape, while their processing and transport cause greenhouse gas emissions. One way of conserving resources is to **recycle concrete**. When houses are demolished, for example, the waste concrete can be saved and reused in new construction projects.



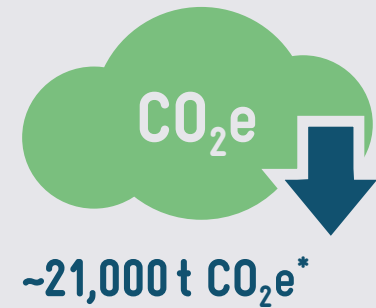
Argentina's Institute for Standardisation and Certification has expanded the national building regulations (CIRSOC) and created the legal basis for the use of recycled concrete. According to this new CIRSOC 200 building regulation, 30% of the coarse aggregate in the mixture can be replaced with recycled aggregates. Non-load-bearing structures can even contain up to 100% of recycled aggregates. This reduces greenhouse gas emissions.

**30 – 100 %**

recycled concrete can be used



If three-quarters of Argentinian public construction projects were to comply with the new building regulations, annual savings of greenhouse gas emissions would be:



\*Equivalent to the GHG emissions of 2,465 return flights from Berlin to Buenos Aires.

Calculation based on annual production volume of 11.9 million tonnes of cement in Argentina in year 2019

**TACKLE CLIMATE CHANGE...**

...by making material efficiency

part of your climate strategies.



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