

**Summary**

The Engineering and Technical Capabilities Department at VINCI Construction Grands Projects has developed the tool CO2CRETE IMPACT™, in collaboration with VINCI Construction France, Eurovia and its main suppliers. The tool can evaluate the carbon emissions of concrete with relation to its formulations and installation processes. It is compliant with the carbon offset charter in effect at ADEME (the French environment and energy management agency).

**Developers: VINCI Construction & Eurovia**

Applicable sectors						Themes			
All Infrastructure	Buildings	Roads	Water	Energy	Transport	Construction	Materials	Ecology	Wastewater
							Potable Water	Carbon/GHG	Other

<b>Countries</b>	International	<b>Access</b>	Commercially available
<b>Compatibility with other tools</b>	No specific tool	<b>Guidance for users</b>	Tool support comes in the form of VINCI Eurovia consulting services.
<b>Inputs &amp; outputs</b>	<p>The main entry of data for CO2CRETE IMPACT™ are the constituents and formulations of concrete, transportation and installation conditions, and the geographical properties of the worksite.</p> <p>The software can also take into account the impact of the most advanced concrete-production techniques such as the use of alternative binders, process applications, and the presence of cooling or heating systems.</p>	<b>Methodology</b>	<p>CO2CRETE IMPACT™ calculates carbon emissions relating to the formulation and installation processes of concrete by utilising information including concrete constituents, formulations, production techniques, transportation and installation conditions and the geographical properties of the worksite.</p> <p>CO2CRETE IMPACT™ can also be used as a design tool that compares concrete's technical variations to reduce its impact and optimize its cost-effectiveness.</p>
<b>Database library</b>	CO2CRETE IMPACT™ as a software is a combined spreadsheet and database with substantial inbuilt data relating to concrete production and installation.	<b>Data intensity &amp; flexibility</b>	Data intensity is low. The software's inbuilt database implies that by using a small set of simple data, the tool can evaluate the carbon emissions of concrete with relation to its formulations and installation processes.