

NET ZERO ENERGY CONSUMPTION, AND NET ZERO CARBON BUILDINGS IN CHILE

1 DEFINITIONS PROPOSED IN CHILE

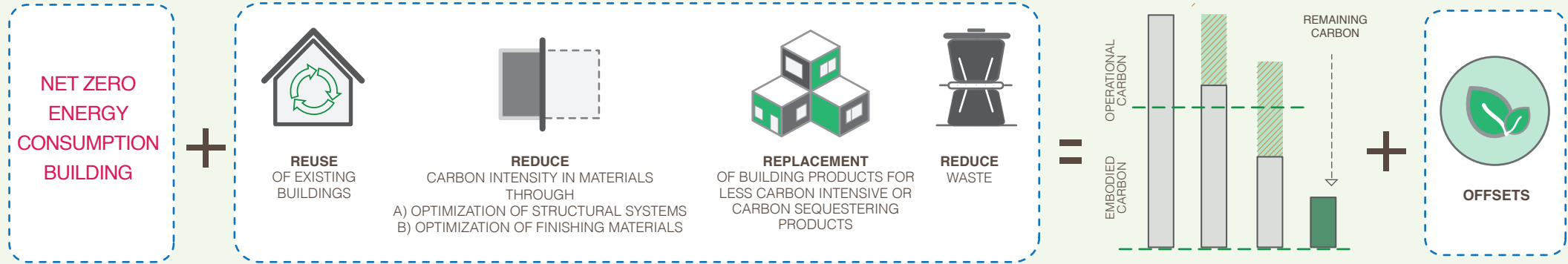
NET ZERO ENERGY CONSUMPTION BUILDINGS

"Building that thanks to its passive design achieves a high energy performance, and its net annual energy consumption is covered by renewable energy sources that are generated on or near the site".

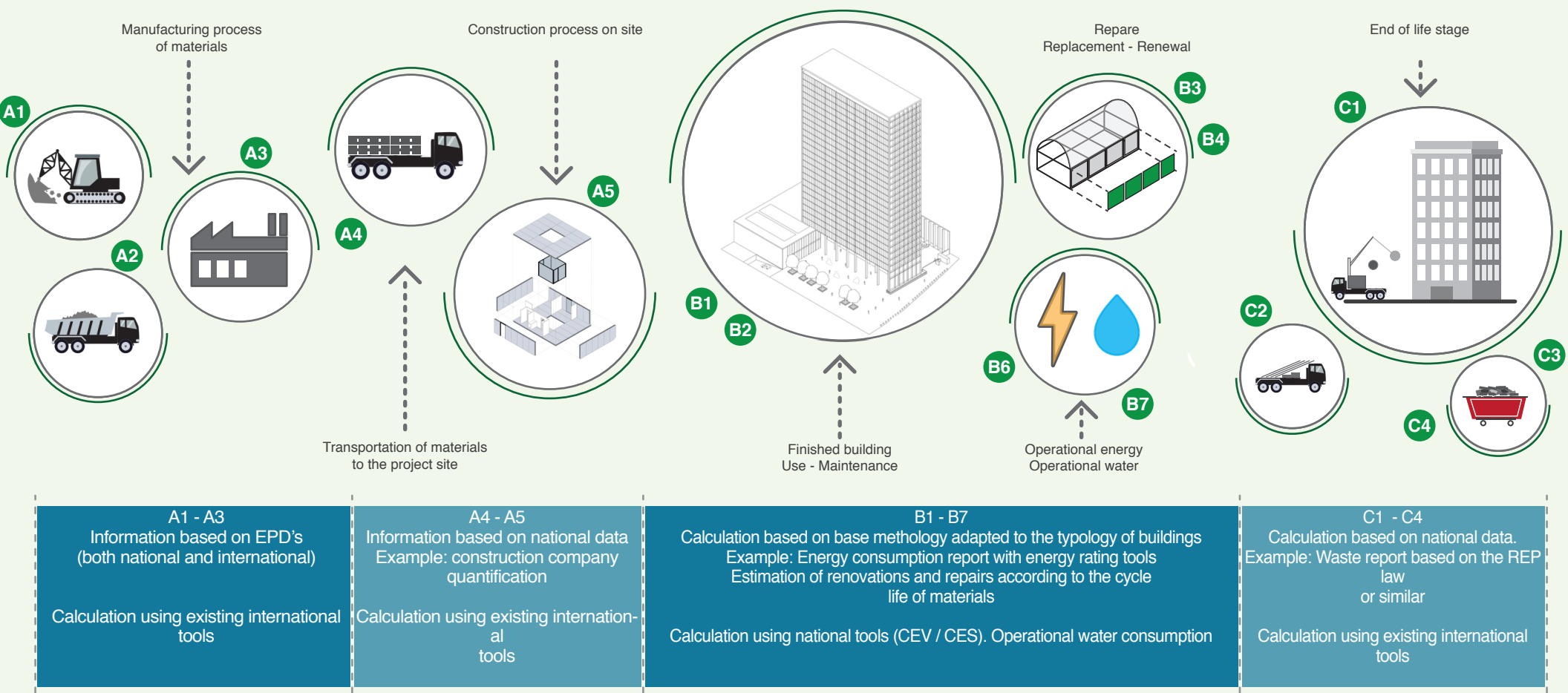
NET ZERO CARBON BUILDINGS

"Net zero energy consumption buildings, that during its life cycle (production, construction, operation, end of useful life), manages to minimise its incorporated carbon emissions and offset for any remaining carbon".

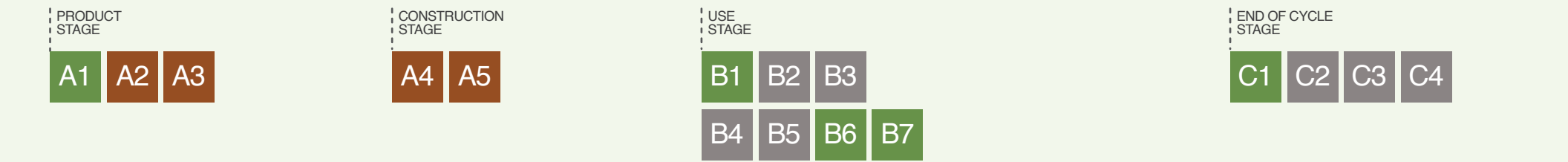
2 CRITERIA FOR DESIGN AND CONSTRUCTION



3 STAGES OF THE LIFE CYCLE CONSIDERED IN THE DEFINITION



4 INTEGRATION PROPOSAL AT A REGULATORY LEVEL AND TOOLS



QUANTIFICATION TOOL

- Opportunity in ABACO (2015) y RUKARU (2021) (in development).
- Quantifications of incorporated carbon can be homologated to tools such as One click LCA o Ecoinvent while the national framework has information
- A4 opportunity through RETC platform (Registro de Emisiones y Transferencia de Contaminantes / Pollutant Release and Transfer Registry) on-site
- B1, B6 y B7 can be quantified through national tools (CEV methodology for the residential sector and CES for the non-residential sector).
- B1, B2, opportunity through tools like **CAPE, Energy City** (Comuna Energética), Energy Management Platform.
- B3, B4 y B5 must be calculated in the general quantification through life cycle estimates and periodicity of renewals.
- There is no currently defined tool. There is an opportunity to extend the application of existing tools.
- C4 opportunity through RETC platform (Registro de Emisiones y Transferencia de Contaminantes / Pollutant

REGULATORY FRAMEWORK

- There is a regulatory framework - Building Carbon Footprint Calculation Methodology through ISO ISO 21930:2017.
- There is an opportunity to gradually promote aspect A1 (raw materials), through the voluntary requirements of CES and CVS (request EPD as evidence).
- In the non-residential sector, there is an opportunity through an energy rating tool under development, where its calculation methodology can be based on the standard NCh 3496-1, 2021: general evaluation EPD.
- Opportunity to enhance the recovery of waste through tools channeled through the Recycling Promotion Law, by extending it to the construction sector.
- The incorporation of the compensation of emissions in construction will be generated through the law to promote recycling.

■ Tool exists and regulatory framework / certification ■ Tool exists ■ There is no tool and regulatory framework

First version infographic, June 2021.