## WE HAVE A CLIMATE EMERGENCY

Humans' greenhouse gas emissions increase Earth's average global temperature every year. At the same time, cities are growing and with them the need for new housing and buildings.

The construction and real estate sector today is responsible for 37% of the energy used in Sweden and 21% of national greenhouse gas emissions. In 2045, Sweden must reach net zero greenhouse gas emission according to a decision by the government. By then all buildings will be constructed with net zero emissions. To get us there, we will need a transition to a climate neutral construction and real estate sector. It's not too late to reach our goal. But we need to get started right away.

### MEETING THE DEMANDS OF THE FUTURE

 ${
m NollCO}_2$  is an effective and smart investment to meet the demands of the future, as well as the demands of the customers today.

The National Board of Housing, Building and Planning estimates that at least 600 000 new homes will be needed until 2025. This is one of the major social and sustainability challenges for Sweden. At the same time, sustainable development has never before earned this much interest. Consumers, financial institutes, foreign capital funds, media, banks, and tenants, increase their demand for green buildings and social responsibility. The NollCO<sub>2</sub> certification of your construction project is a smart and effective investment to face up to these demands.

## WHAT IS NOLLCO<sub>2</sub>?

The "NoIICO2" certification scheme is an add-on certification scheme to BREEAM-SE, Miljöbyggnad, LEED and Svanen, helping developers achieve net zero carbon buildings.

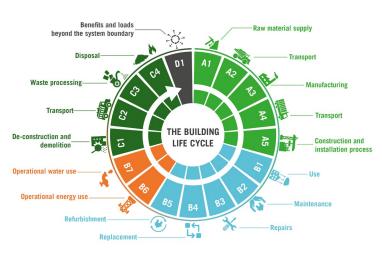




# REDUCING AND OFF-SETTING FOR NET ZERO CARBON BUILDINGS

Today, building materials are still produced using GHG emitting processes, and that's why we cannot build completely without climate impact.

- » NollCO<sub>2</sub> forces manufacturers and entrepreneurs to reduce their processes' GHG emissions as the NollCO2 project must meet a set reduction target of the building materials' and building processes' climate impact.
- » NollCO<sub>2</sub> projects off-sets the remaining GHG emissions with climate action in the form of investments in Swedish renewable electricity production, increased energy efficiency in Swedish buildings, and traditional carbon offsetting.



### Exterior roofing Ventilation Interior escalators Elevator system Heating system Climate control system Exterior walls, e.g. cover material, windows, doors Interior building parts e.g. Grid and floor walls, flooring, glass sections Escalator system Interior surface materials Electrical and telecom systems Water supply Foundation, piling Sewage system fundament, bottom plate etc

## **BUSINESS VALUE OF NOLLCO**<sub>2</sub>

Choosing to NoIICO<sub>2</sub>-certify ones building project means being at the forefront of the action for climate change.

- » Contributing to suppliers and entrepreneurs with a low climate impact being preferred, and those who are fast transformers can increase their market share and as a result, an overall lower climate impact.
- » Having a climate-smart resource strategy drives the market towards recycling and reuse, increasing business value of recycled and reused resources.

## THE BUILDING'S SYSTEM BOUNDARY

To certify a building as a net zero building, we must conduct a full climate impact audit.

A full climate audit requires a system boundary that includes all parts of the building, also the foundation, basement, and technical systems.

# WHEN WILL NOLLCO, BE AVAILABLE?

 ${
m NollCO_2}$  version 1.0 is released on referral April 20th and is expected to be launched early September 2020.

You can answer to the referral on SGBC.se. On this page and in our newsletters, we regularly publish updates. You can also follow SGBC on LinkedIn.

# CONSIDER THIS WHEN YOU NOLLCO<sub>2</sub>-CERTIFY YOUR BUILDING DEVELOPMENT

If you want to NoIICO<sub>2</sub>-certify your development project, you need to consider the following issues in the development stages:

#### PLANNING AND PROGRAM STAGE

- Can the project meet the NollCO<sub>2</sub> certification limits for climate impact of building materials (A1-A3) and transports and processes (A4-A5)?
- Can the project make use of reused or recycled materials?
- How are the material choices for frame and shell affected by surrounding buildings and climate? Are reinforcements needed, vapor barriers, insulation etc.?

#### **DESIGN STAGE**

- How does choice of materials, technical systems, and energy sources change climate impact?
- Can an early dialogue with potential suppliers reduce climate impact?

#### **TENDER PROCESS STAGE**

- What requirements regarding low climate impact of building materials, transports and construction processes can be formulated in tender documents?
- Can early collaboration with contractors reduce climate impact?

#### **CONSTRUCTION STAGE**

- How can material spillage at construction site be reduced?
- How can climate impact of construction and transport processes be reduced?
- How can you register installed building materials, products, and systems effectively? Can the logbook or the digital twin be of use?