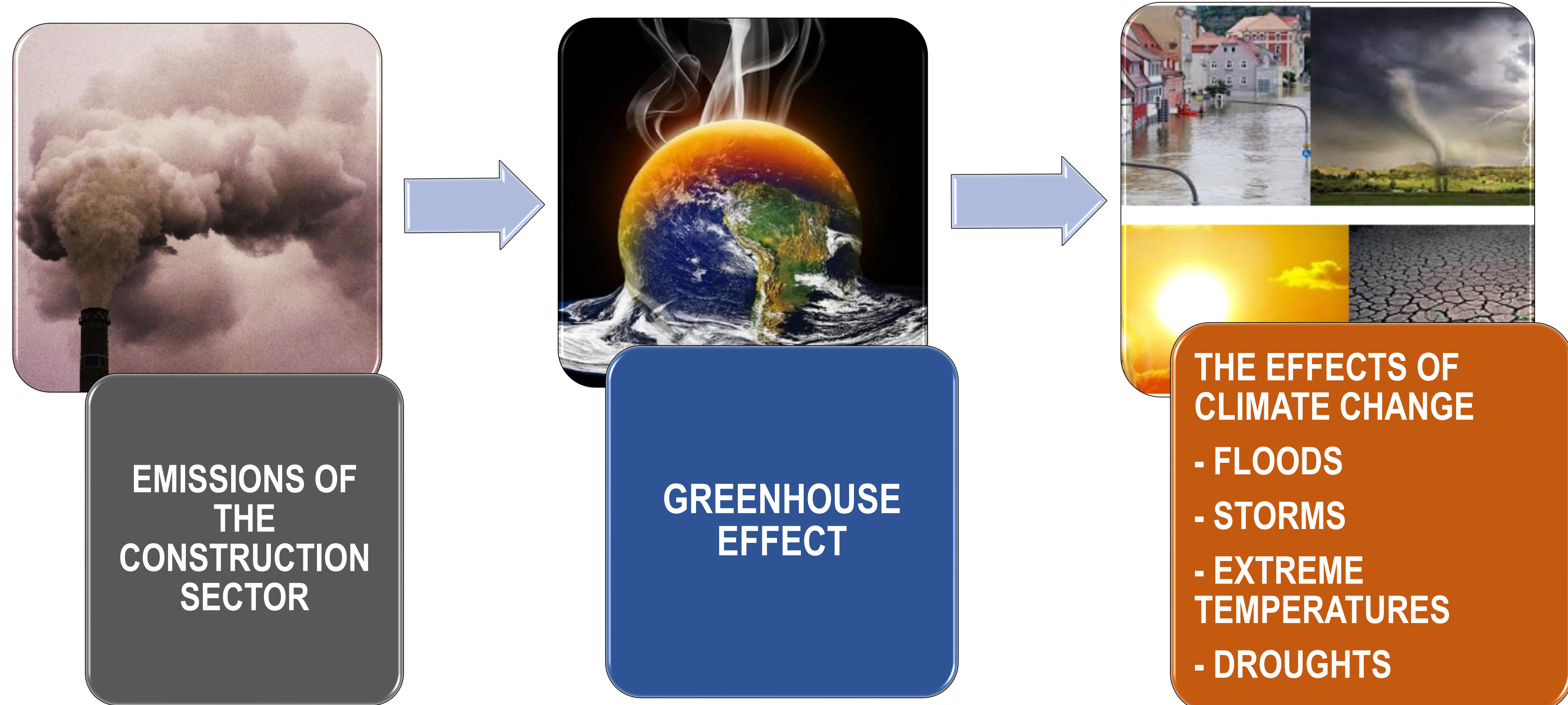


## Climate resilient localities – from classic materials to traditional sustainable building materials

*Ioana-Mihaela ALEXE<sup>1</sup>, Adrian-Alexandru CIOBANU<sup>1</sup>, Aurelia BRADU<sup>1</sup>, Alexandrina-Maria MUREȘANU<sup>1</sup>*

<sup>1</sup> NIRD "URBAN – INCERC", 266 Pantelimon st, 021652, Sect. 2, Bucharest, Romania



The present project aims to bring Romania closer to the global requirements regarding adaptation to climate change, by creating new products, using local resources, sustainable traditional materials (wood, mud, clay, straw, seeds, etc.) to be used in constructions and which can successfully replace classic materials used today.

Climate change is mainly caused by human intervention. Human activities cause greenhouse gas emissions that result in long-term changes in weather phenomena. Thus occur extreme temperatures, drought and forest fires, lack of availability of fresh water, floods, landslides, etc. People, societies must adapt to these consequences of climate change, this means adapting housing, infrastructure and natural ecosystems. These changes entail significant costs, which, however, will reduce the future costs of repairing the consequences of disasters caused by climate change.

In the last year the building and construction sector has made a major contribution to climate change, registering an all-time high.

One of the directions of action of the "National Strategy on Education for the Environment and Climate Change 2023-2030" elaborated in January 2023 in Romania is the adaptation of the built and living space to these climate changes. This can be achieved through proper urban planning and development. As for the constructions, they must be adapted to the new climatic conditions (such as extreme temperatures, floods).

The construction materials specified in the design or used in the construction are generally the classic ones (concrete, brick, AAC etc.). To reduce costs, construction materials should be chosen, as far as possible, from those available locally.

The development and adaptation of the built environment means the development of new techniques and markets for materials, products and constructive systems for sustainable constructions that are resistant and adapted to the effects of climate change.



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