We live on a planet of finite resources. Due to the scarcity of resources, unsustainable production and consumption patterns and the consequent environmental impacts, the limits to further economic growth became clear to the scientific community. Moreover, it was established that economic growth does not provide a sense of happiness and prosperity, at least not after GDP per capita reaches a certain level. However, the current economic and political systems still function in the paradigm of constant economic growth, and the limits to growth are broadly neglected by the main stakeholders, such as politicians, business, etc. Despite this, several alternative concepts of socio-economic development have appeared, one of which is degrowth. It is based on ideas of ecological economics and social equity, and the main idea behind this concept is to decrease the size of the global economy by fair reductions in global production and consumption levels. The proponents of degrowth emphasize the necessity of having an immediate, voluntary and fair process of reducing production, consumption and ecological footprint levels in the global economy, which they explicitly distinguish from the involuntary and harmful process of economic recession (acknowledging that the latter might happen if the economy continues to grow). At the same time, degrowth emphasizes a high quality of life combined with reducing the ecological impacts of economic activity to a sustainable level, along with equitable distribution of wealth among nations.

Degrowth is getting more and more attention in the academic world, but it remains a broad theoretical framework, rather than a precise strategy for socio-economic transition. Clear ways of operationalizing and measuring degrowth transitions are still lacking. Putting forward indicators for measuring the progress of the degrowth transition are needed, especially in an urban context, to which little attention has been paid so far in the degrowth discourses. Cities are crucial for global sustainability, as nowadays they are home to over half of the world's population, and this number will increase to 60% by 2030. They generate 80% of the global economic output and are responsible for 2/3 of the global energy demand and 75% of carbon dioxide emissions – even though they occupy only 3% of the planet's land. At the same time, cities are the hubs for ideas and learning, where various ideas to counter unsustainable practices appear and may be scaled up globally.

Therefore, the key research problem addressed in this project is how to operationalize the concept of degrowth, especially in an urban context. We hypothesize that such operationalization is possible with the use of a relevant set of indicators. Our main objective is to create a comprehensive set of indicators, specifically designed for an urban context, albeit allowing for flexible use in different national and developmental contexts. The two other objectives of this project involve investigating the linkages between degrowth and other concepts of socio-economic development in an urban context, such as sustainability transitions and the related phenomena, such as shrinking cities. Finally, our fourth objective is to connect the above problems considered at the local scale with global planetary boundaries.

The project is divided into four work packages corresponding with the objectives to be reached. In Work Package 1, linkages between degrowth and other concepts of socio-economic and ecological development will be sought, which will help to identify the key aspects of urban development which require attention in this context. Work Package 2 involves establishing what degrowth means in an urban setting and how to measure progress in this context. This will include creating a set of indicators for measuring degrowth and verifying them in selected case study cities. Work Package 3 will relate to the links of degrowth and shrinking cities and imply a verification of the previously selected set of indicators in the case of shrinking cities, comparing the identified indicators for selected case study cities and answering the question if cities can "shrink" voluntarily. Finally, in Work Package 4, the concept of planetary boundaries will be connected with degrowth, both conceptually and operationally. Our degrowth indicators, defined in Work Package 2, will be connected with those put forward in the discussions on planetary boundaries and doughnut economics, and quantified for global urban areas using data from the UN-Habitat program.