

# Pathways for transition to Biocities

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Biocities are analogous to a forest ecosystem, a dynamic complex of plant, animal and microorganism communities and their accompanying abiotic environment. The urban analogue is that the 'city' is not only home for all the above (in a modified way), but humanity too. When in balance it is reasonable to consider this as a biocity.

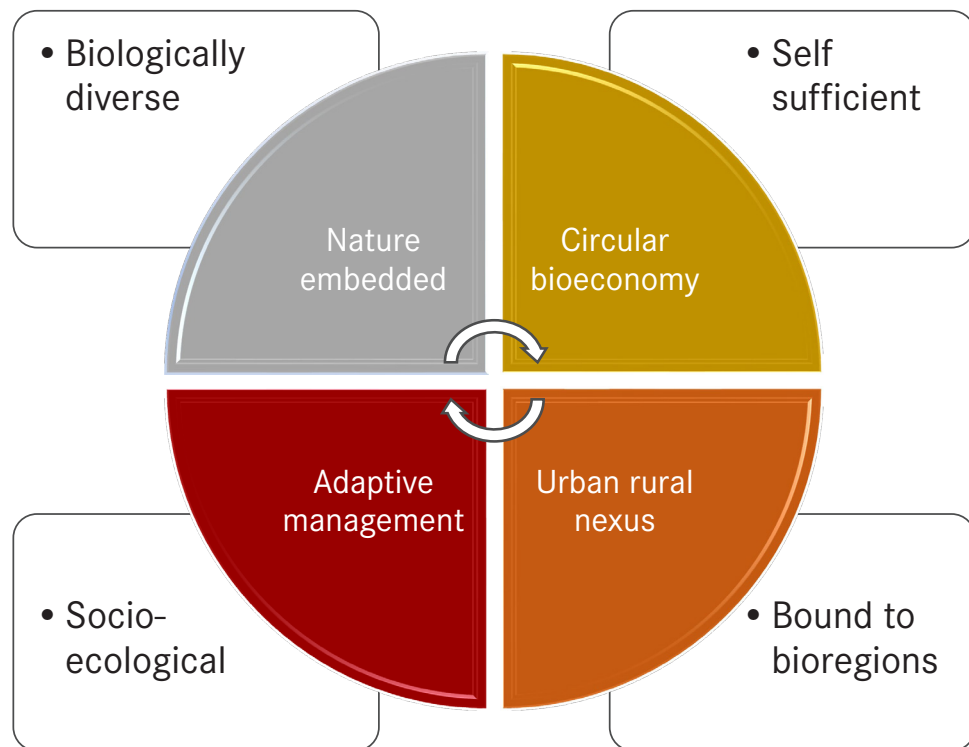
Biocities	Forests
Highly dynamic	
In mature state sustainably and self-renewing community	
Interaction between living environment (biological) and physical infrastructure (abiotic)	
Complex home to humanity and different species	Complex vertical and horizontally stratified biological systems
Multifunctionality and connectivity based on city planning and policymaking	Multifunctionality and well-connected between micro and macro scales

◀ Comparison of Biocities with forests.

Cities can transition to a biocity by following a series of pathways.

- I. **Granting universal access to all:** Biocities should provide universal access to ecosystem goods and services for society as a whole.
- II. **Full involvement of its citizens:** Biocities fully involve their citizens in the different steps of the planning, design and management of it through co-production, co-design and co-creation.
- III. **Work together to achieve common objectives:** The public sector, private companies and citizens work together to achieve common objectives in a biocity.
- IV. **Achieve social inclusion of marginalised groups:** Biocities promote social innovation and engagement of civil society to achieve social inclusion of marginalised groups through access to nature and its benefits.
- V. **Achieve societal transformation:** Collaborative planning, design and management processes combining the ideas of entrepreneurship, civic engagement and societal transformation in a biocity.
- VI. **Use innovative financing approaches:** Biocities fund their natural capital through innovative approaches such as blended finance, tax incentives, crowd-funding or micro-contributions.
- VII. **Reduce consumption and waste:** A biocity steers its development towards a circular economy to reduce consumption of natural resources and the production of waste.

Four basic principles have been devised that align the biocity concept with the forest ecosystem and these are shown in the figure.



Based on a systematic assessment of the current city, realistic timeframes, milestones and a monitoring and evaluation framework will need to be developed with local agencies and sectors to become a biocity. While this is iterative, the adoption of existing key performance indicators, monitoring, and evaluation systems to the specific needs of a biocity is encouraged, as it is resource efficient. There is also ample opportunity for experimentation in the transition such as exemplar Bio-Neighbourhoods and Living Laboratories.

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Clive Davies, Fabio Salbitano, Giuseppe Scarascia-Mugnozza, Simone Borelli. Towards BioCities – The Pathway to Transition. In Giuseppe Scarascia-Mugnozza, Vicente Guallart, Fabio Salbitano, Giovanna Ottaviani Aalmo, Stefano Boeri (Eds). Transforming Biocities: Designing Urban Spaces Inspired by Nature. Springer (forthcoming).