

23.5 Number of new businesses created and gross value added to local economy

Project Name: URBAN GreenUP (Grant Agreement no. 730426)

Author/s and affiliations: Jose Feroso¹, Silvia Gómez¹, María González¹, Esther San José¹, Raúl Sánchez¹

¹ CARTIF Foundation. Parque Tecnológico de Boecillo, 205, 47151, Boecillo, Valladolid, Spain

Direct economic activity: New businesses attracted and additional business rates	New Economic Opportunities and Green Jobs
Description and justification	This KPI, related to economic aspects measurements, evaluates how NBS interventions can increase the attraction of businesses, or how to increase the value of the existing ones. This value, evaluated through the measurements of number of new business created and the percentage of the gross value added, will reflect the economic opportunities and potential of NBS solutions.
Definition	The impact assessment of the implementation of NBS in terms of new business creation and improvement on business rates.
Strengths and weaknesses	<ul style="list-style-type: none"> - Medium or long term assessment - It needs municipality data from different departments. - This KPI will require citizens' collaboration, so recovering the data could be difficult.
Measurement procedure and tool	<p>Number of business created (direct value buss related NBS by zone) Direct value on business created by zone NBS affected, before and after implementation, during the established period. Number of business created= $n * Z [(n^{\circ} \text{ business}) (\text{€}/\text{m}^2)]$ Where n is referring to the number of business and Z to its increased value (NBS related by zone), during the established period of implementation (directly related to the each particular NBS)</p> <p>Gross value added (GVA) Defined as the difference between the value of goods and services produced and the cost of raw materials and other non-labour inputs, which are used up in production. The research should conclude what is the total contribution of NBS in % of the total GVA to the region/area economy in EUR per year.</p>
Scale of measurement	City / neighbourhood
Required data	City official data, city platforms, questionnaires, small-medium enterprise account (Related to de NBS investment zone)

Data input type	<ul style="list-style-type: none"> ▪ (n° business) (€/m²) ▪ (n° business or n° users) (kg/year) (€/year)
Data collection frequency	Annually
Level of expertise required	Technical / Basic
Synergies with other indicators	-
Connection with SDGs	SDG1 / SDG4 / SDG5 / SDG8 / SDG10 / SDG11 / SDG12
Opportunities for participatory data collection	None identified
Additional information	
References	<p>URBAN GreenUP Deliverable D2.4 - Monitoring program to Valladolid. https://www.urbangreenup.eu/insights/deliverables/d2-4---monitoring-program-to-valladolid.kl</p> <p>URBAN GreenUP Deliverable D3.4 - Monitoring program to Liverpool https://www.urbangreenup.eu/insights/deliverables/d3-4---monitoring-program-to-liverpool.kl</p> <p>URBAN GreenUP Deliverable D4.4 – Monitoring program to Izmir https://www.urbangreenup.eu/insights/deliverables/d4-4--monitoring-program-to-izmir.kl</p> <p>URBAN GreenUP Deliverable D5.3: City Diagnosis and Monitoring Procedures https://www.urbangreenup.eu/insights/deliverables/d5-3-city-diagnosis-and-monitoring-procedures.kl</p> <p>An impact evaluation framework to support planning and evaluation of nature-based solutions projects; An EKLIPSE Expert Working Group report, 2017</p> <p>"The Model of the Environmental Sustainability Matrix" ("El Modelo de la matriz de Sostenibilidad Ambiental"); La ordenación Urbana y el Desarrollo Sostenible, Angel Ibañez Ceba, Fermín Cerezo Rubio, August 2009</p> <p>Expert evaluation network delivering policy analysis on the performance of Cohesion policy 2007-2013, 2013, "Job creation as an indicator of outcomes in ERDF programmes", Synthesis report, August 2013, A report to the European Commission Directorate-General for Regional and Urban Policy</p> <p>Forestry Commission, Scotland, The economic and social contribution of forestry for people in Scotland, David Edwards, Jake Morris, Liz O'Brien, Vadims Sarajevs and Gregory Valatin, September 2008</p>

23.6 Recreational monetary value

Project Name: Nature4Cities (Grant Agreement no. 730468)

Author/s and affiliations: Javier Babí Almenar¹, Claudio Petucco¹, Benedetto Rugani¹

¹ RDI Unit on Environmental Sustainability Assessment and Circularity / Environmental Research & Innovation (ERIN) department / Luxembourg Institute of Science and Technology (LIST) – 41 Rue du Brill, L-4422 Belvaux, Luxembourg

Recreational monetary value	New Economic Opportunities and Green Jobs
Description and justification	This is an estimation of the economic value of recreation inside urban NBS interventions. For many nature-based interventions in urban areas recreation is a main function. Then, when doing monetary quantifications of costs and benefits it is important to include the monetary value of recreation. It can be used as part of cost-benefit analysis that consider positive and negative externalities and not only internalized benefits and costs.
Definition	The indicator recreational monetary value estimates the monetary value of recreation in urban NBS interventions based on key components (trees & shrubs, herbaceous plants, water, and size of the NBS), the density of people around the NBS intervention, and willingness to accept value (distance and euros) of recreation in NBS of an average person.
Strengths and weaknesses	<p>Strength: This indicator will anticipate the monetary value that recreation in a public urban green space could have making use of a simple procedure. Additionally, the value can be calculated per year, taking into account changes in the NBS over time.</p> <p>Weakness: The procedure require to know two values: i) the monetary value of an average person visiting the NBS for recreation per year; and ii) the distance that an average person is willing to walk to visit an NBS based on key attributes. These values can be obtained from similar case studies making use of benefit transfer methods. However, the best option would be to calculate it locally, which it is time consuming. This indicator is specific for urban environments.</p>