

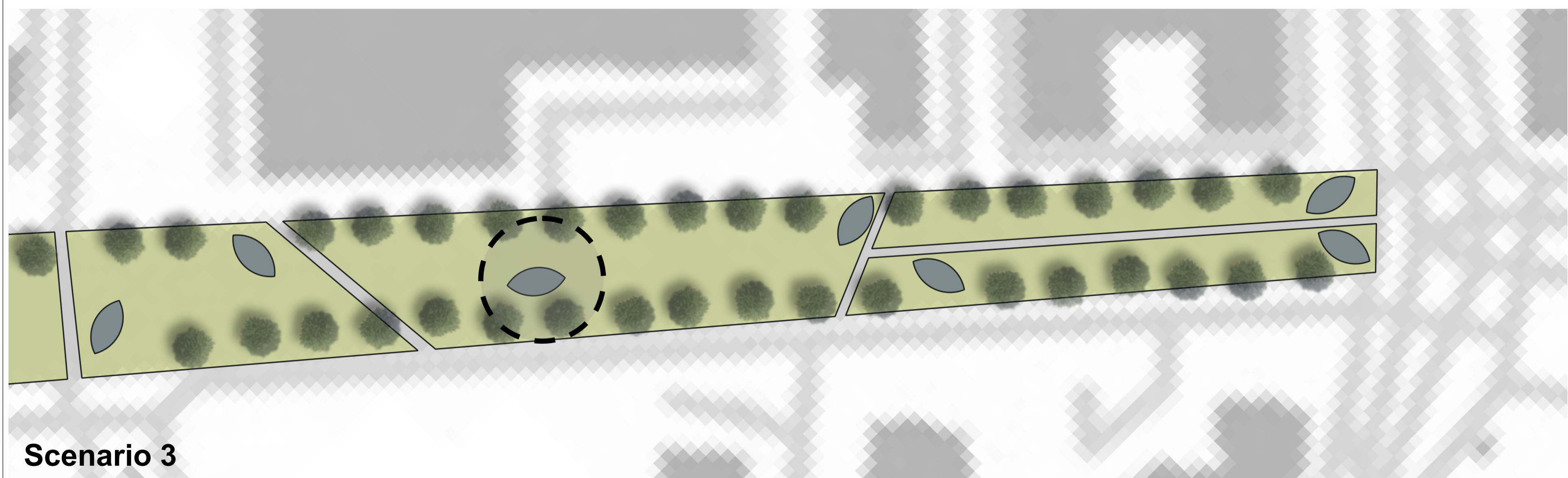
Socio-economic benefits

While our project is basically a biogas plant, it may be easily integrated into any recreational park or garden area, across a range of spatial scales. This is achieved through a modular design of the SIATAI system (single to multiple units), as well as the SIATAI unit itself (full-unit, half-unit). The local communities are welcomed to participate in the bio-energy production by supplying their bio-waste to the system (inlets will be easily available to the public). This could start an interesting local social behavior – going to a park, taking your bio-waste with you, to improve climate and produce free energy (however; it is not mandatory, and the multiple-units version of our system will also work without contributions from outside). Part of the produced biomass will be available to the local communities (harvested from the system units, instead of going to biogas production). In such way, the local communities will gain far more than free energy.

Sustainable Development Goals support

SIATAI addresses several UN Sustainable Development Goals (SDGs), in particular: 7. **Affordable and clean energy** – is our main goal, we propose a new system solution, which may be applied to other areas; 13. **Climate action** – our solution will help reduce greenhouse gases emissions, and exert moderating effects on local climate; 11. **Sustainable cities and communities** – our project will make the local communities more sustainable by delivering free energy, in a long run; 2. **Zero hunger** – our system also produces food – high quality vegetables, which may be easily collected and delivered to the local communities; 4. **Quality education** – the SIATAI system may serve as a perfect educational tool, where pupils and students may spend a whole day learning about sustainable energy methods, climate change, plant biology, and many more; 9. **Industry, innovation and infrastructure** – we propose an innovative system, which is a merger of several existing energy collection technologies, and also some novel ideas (such as the “micro-trembling structural elements”).

The other SDGs may be addressed by our project to a lesser extent, such as “1. **Poverty reduction**” – the solution may help some poor people by delivering free energy and quality food; or “12. **Responsible consumption and production**”, while we propose a zero-waste energy production.



Scenario 3

