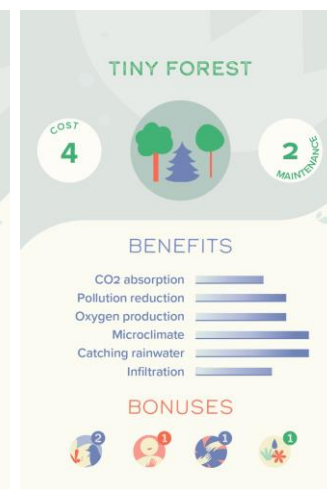
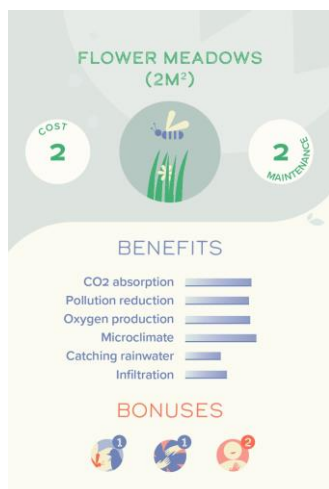
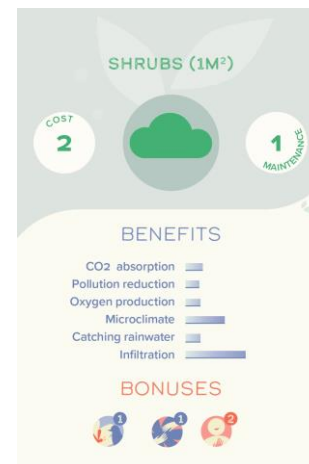
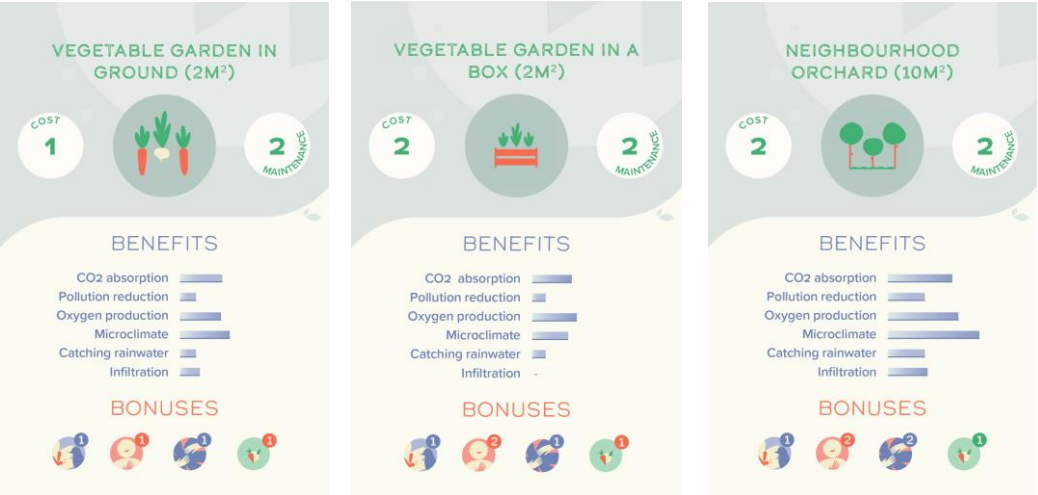


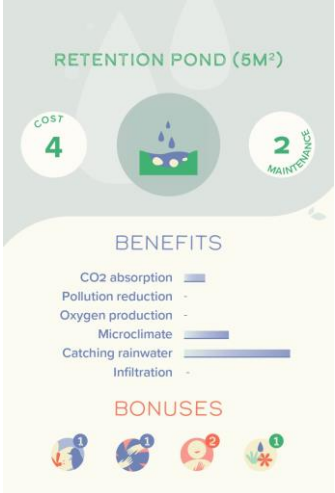
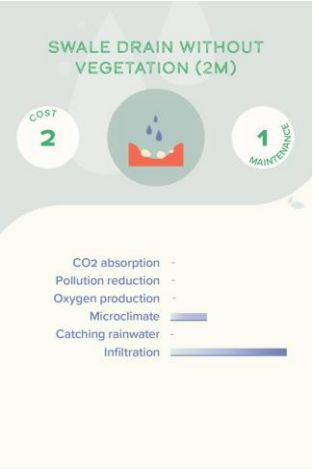
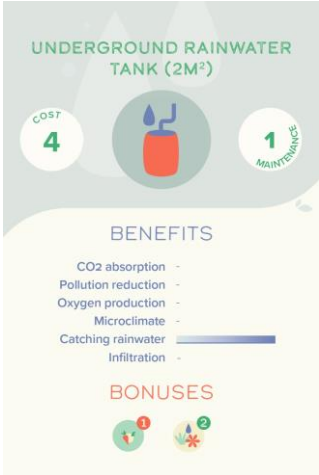
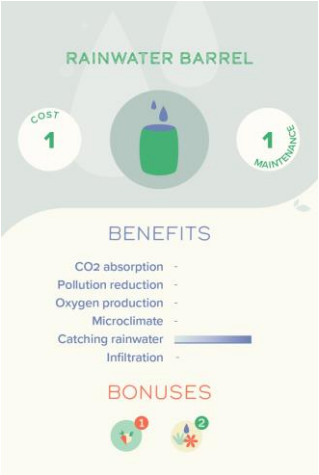
Nature based Solutions (NbS) related to vegetation



Nature based Solutions (NbS) releted to food production



Nature based Solutions (NbS) reletd to storm water storage



Nature based Solutions (NbS) related to technical buildings and structures

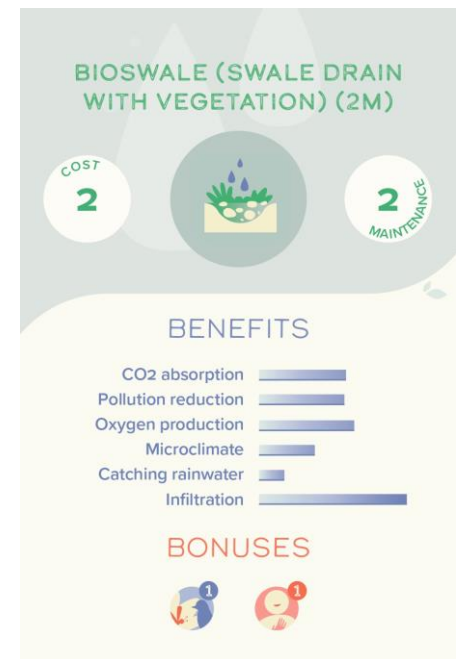


Renewable energy sources

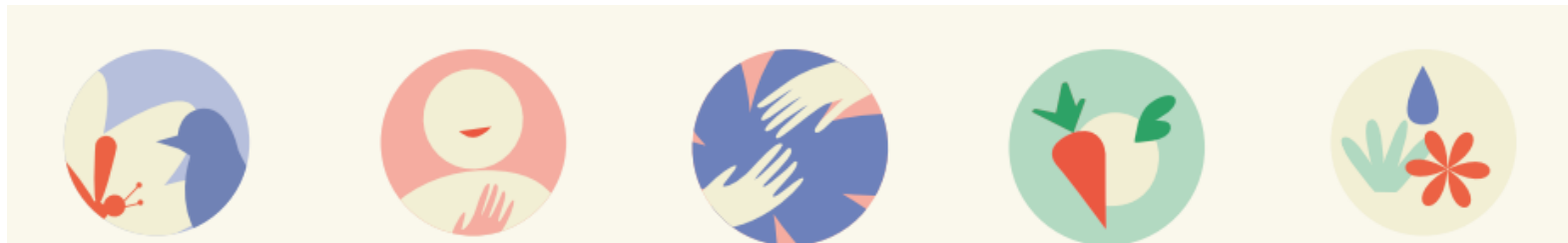


The effects of pro-adaptive solutions

- **CO2 Absorption** – CO2 is produced by animals during respiration and the decomposition of biomass. It is also generated by the combustion of fossil fuels. It is removed by plants during photosynthesis.
- **Reduction of pollution** – gases harmful to humans (O3, SO2, NO2) are captured by plants, which absorb them through the stomata located on the leaves, while dust in the air settles on the surface of the plants
- **Oxygen production** – trees produce oxygen; one hectare of forest produces approximately 700 kilograms of oxygen in 24 hours. The trees that provide the largest amounts of oxygen include: common beech (1.1 kg), maple (1.1 kg), oak (0.8 kg), linden, and ash (0.7 kg).
- **Microclimate** – the improvement in the microclimate within the estate is related to improved air exchange, cooling of the air temperature, and increased air humidity – the temperature of shaded ground can be up to 19°C lower compared to sunny ground.
- **Interception** – the retention of rainwater by vegetation on leaves and bark can reach up to 50% in densely forested areas.
- **Infiltration** – the infiltration of rainwater into the ground, which ensures the replenishment of soil and groundwater and contributes to drought reduction.



Additional benefits from implementing pro-adaptive solutions



Biodiversity

Social satisfaction

Social activity

Food
production

Economic bonus
/resources to use