



THE AUTONOMOUS OFFICE

Model for a green energy autonomous office building (LIFE11 ENV/ES/622)



Name of the Report: Lessons learnt

Partner responsible for this deliverable: All partners



Lessons Learnt

The autonomous office LIFE+ project execution was linked to the construction of a building, which was outside of the technical and economical scope of the project but necessary for its successful development. The building promoter was BFC, one of the associated beneficiaries of the project. This complex situation directly affected the project execution and management being a severe risk for successful project performance. Delays were followed one another slowly but steadily. TSK as well as all the other partners struggled trying to address this issue with no evident or easy solution.

Based on the intermediate results obtained from the performed tasks related to the design, conceptualization and prototyping knowledge and best practices are reported in the project deliverables addressing the following activities:

- Thermal optimization of the building
- Analysis and measurement of solar and wind renewable energy sources
- Analysis of the use and reuse of water
- Sustainability strategy of the building in three areas: sustainable sites, materials and resources and environmental indoor quality
- Passive cooling systems
- Definition and execution of the ICT needs
- Definition of the passive and active strategies for bioclimatic design
- Natural ventilation and natural lightning
- Design of BIPV Prototypes
- Detail engineering of an energy storage system based on hydrogen.
- Design and implementation of an innovative and energy-efficient heating, ventilating and air conditioning (HVAC) installation.
- Design and full prototype production of all the systems and equipment for the collection, treatment, and reutilization of rain and grey waters