



T3 FOSTERING THE CO-CREATION OF LOCAL ENERGY COOPERATIVES AND IMPLEMENTATION OF CITIZEN BASED PILOT ACTIONS

**D.T3.12.2 - Planning of the pilot action, the
CO2-Clima-Clock in the Town of
Pfaffenhofen**

**Version 1
10 2021**





Relation to the project and the process of the planning of pilot actions in the Town of Pfaffenhofen

The planning of a CO₂-Clima-Clock as a calculation/measurement instrument was an important and interesting phase for our citizen, our stakeholders and our partners. Multiple individual coordinations and planning discussions in the period February to June 2021 took place. The citizen in the BEG (Citizen Cooperative Pfaffenhofen, PP09), our local cooperative partner the SWP (PP09) and several supplier, external service providers helped us in the planning phase.

In order to make the process more transparent, we will use a mirror-like representation in the following section of this report.

- The aim also was to make climate change "comprehensible" to a wider public and to illustrate it very visually.
- In the workshops 1 and 2 of DT3.12.1 an "calculation and design of design variants, a determination of the "Candidate Design" and an qualification of public places for the installation of the CO₂-Clima-Clock took place.
- In the first step, discussions were held and information gathered to identify qualified service providers and to obtain a qualified estimate of hardware costs. See e.g. Table 1 in the appendix.
- In a second step, the planning was refined (17.04.) and then offers were obtained from the selected suppliers and savings potentials were developed. See e.g. picture 1 in the appendix.
- The location factors of the CO₂ climate clock were further deepened and the location in the Arlmühle building was secured.
- Final offers were obtained later.
- The preparation, especially the planning for the implementation (OT3.1) of the pilot project of the BEG was essentially completed in June.

From experience, if appropriate in the general interest, we would like to add the following:

From our experience, the duration of the planning phase for smaller BEG projects is around 6 months.

Due to the good network of a citizens' energy cooperative, the planning could be completed with only little delay despite the pandemic. A success factor was again the group of Leader Peers and Pioneers (LPP ©).



Annexes, Table 1, Working table for estimating hardware costs for the BEG pilot: Coordinated rough approach

| Working table for estimating hardware costs for the BEG pilot: Coordinated rough approach | | | |
|--|--|----------------------|-----------------------|
| Arbeitstabelle zur Abschätzung der Hardware-Kosten für den BEG-Piloten: Abgestimmter grober Ansatz | | | |
| Date: | | 19.04.2021 | 19 Uhr |
| Letzter Bearbeiter: | | Hklos 1) | |
| Hardware used for estimation | | Info source | Costs (without VAT) |
| Angesetzte Hardware zur Abschätzung | | Info-Quelle | Kosten (netto) |
| | | | [EUR] |
| 2 Stück Bildschirme á 750 EUR (brutto) | | Amazon | |
| Rechner: (High End Gaming wg. Graphikleistung) | | Qualified estimation | |
| | | Qualified estimation | |
| Schnittstellen und Zubehör für Bildschirmpräsentation | | Qualified estimation | |
| Bildschirm-Aufstellsystem | | Qualified estimation | |
| Remote-Accesss und Controlsystem | | Qualified estimation | |
| Repeater/ WLAN | | Qualified estimation | |
| Beamer für spätere Anwendungen zur Visualisierung außerhalb und unabhängig von Bildschirmen | | Qualified estimation | |
| Sonstige E-Technik: 750 EUR (brutto) | | Qualified estimation | |
| | | | |
| Abschätzung für das Bedienfeld /Konsole | | Qualified estimation | |
| Sonstige Kosten | | Qualified estimation | |
| | | | |
| Overview of the first rough cost estimate | | | 15.500 |

Annexes, picture 1, Obtaining specific information on the hardware

| Monitor | |
|----------------|---|
| 1 | Iiyama 55 L LH5542UHS-B3 - Flachbildschirm (TFT/LCD) - 139,7 cm 9 ms - 1.300:1 - 500 cd/m ² - IPS - DVI - HDMI - RS-232 |
| 2 | Delock 85318 - 3 m - DisplayPort - HDMI - Männlich - Männlich - Gerade Kabel DisplayPort 1.2 Stecker > High Speed HDMI-A Stecker Passiv 4K 3 m schwarz |
| Rechner | |
| 3 | Fujitsu CELSIUS W 580 - - Workstation - Core i7 3 GHz - RAM: 16 GB DOR4 - HDD: 512 GB NVMe - UHD Graphics 600 WS90power - Intel C246 - Intel Core i7-9700 - 16GB DOR4-2666 - 512GB SSD - Intel UHD Graphics 630 - DVD Super Multi - Intel I219LM - Windows 10 Pro Nvidia Quadro P2200 - 5 GB - GDDR5X - 160 Bit - 5120 x 2880 Pixel - PCI Express x16 3.0 4 x DisplayPort (1.4) - 200 GB/s - 1280 CUDA - 5120 x 2880 (60 Hz) |