



Open Source release of control components and documentation

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1. Introduction

This deliverable serves as a concise reference, outlining the websites and repositories that house the code and documentation for the tools utilized in the Flexsys project. Specifically, it focuses on the COFYbox — the Home Energy Management System (HEMS) implemented in the project, COFYcloud — the cloud-based counterpart of the COFYbox, and various control and calculation algorithms applied throughout the project.

The repositories of code and documentation are intended for three distinct audiences:

1. Developers and maintainers of the tools
2. Parties responsible for the on-site installation of COFYboxes
3. Third parties interested in using or adapting these tools

There are two primary sources for the documentation and code: COFY-docs, a wiki-style platform offering comprehensive guidelines for the installation and use of COFYbox and COFYcloud; and REScode, a dedicated website for documenting and updating software projects created by and for Renewable Energy Service Cooperatives across Europe.

2. COFYdocs

The COFY-docs website, accessible at docs.cofybox.io, serves as the central hub for all project documentation. It provides comprehensive resources on the architecture and components of the COFY-box firmware and software, including data exchange formats and deployment guidelines for the COFY-cloud backend system. Additionally, it offers detailed installation instructions for both end users and technicians responsible for deploying COFY-boxes in the field.

This wiki-style site is regularly updated to ensure it contains the latest information. It will also include a link to the Swagger documentation for the COFY-cloud API, providing further technical insights.

figure 1: Screenshot of the COFY-Docs website

3. REScode

REScode, hosted at code.rescoop.eu, is an innovative and dynamic platform that serves as a comprehensive repository for the software and hardware developed within the Flexsys project and

beyond. Originally created as part of the REScoopVPP project, REScode was designed to transcend the limitations of static documentation, fostering a vibrant and evolving space for project artefacts and community contributions.

As a “living” platform, REScode not only archives our project’s software and hardware but also embraces a wide range of open-source projects, industry standards, best practices, API documentation, and DevOps guidelines. This approach transforms REScode into an ever-growing catalogue that aims to serve and evolve with the needs of Energy Communities across Europe.

Technically, REScode is built using the Pelican Python framework, utilizing markdown files to create and maintain its content. The platform is structured around several key sections, including Projects, Products, Repositories, and Contributors, making it easy for users to navigate. A tagging system is also in place to help users efficiently discover related content and resources.

You can find the repositories related to the Flexsys project at <https://code.rescoop.eu/flexsys.html>