

# PowSyBI

## Description

PowSyBI, short for **Power System Blocks**, makes it easy to write complex software to simulate and analyze power systems. PowSyBI uses a modular approach that allows developers to extend or customize its features. PowSyBI provides the code building blocks for the simulations and analyses of power systems, for horizons from real-time operation to investment planning.

PowSyBI provides an internal complete grid model, with substations, voltage levels, AC and DC lines, two and three windings transformers, batteries, generators, loads, shunt and static VAR compensators, and other components. The grid model can be enhanced with extensions that complete the required equipment modeling - dynamic profile, short-circuit profile, monitoring, etc. PowSyBI also provides import and export functions for several common pan-European exchange formats.

## Technical Information

- [Project roadmap](#)
- [Code repositories](#) via GitHub
- [Maintainers](#) via GitHub
- [Documentation](#) via Github.io, including functional, technical, and user documentation
- [User Story](#) via documentation on Github.io
- [How to Contribute](#) via GitHub
- [License](#) via GitHub

## Community

- [Mailing list](#)
- [Regular meetings](#)

## Important Links

- [Project Charter](#)
- [Web page](#) on [Ifenergy.org](#)

## still to import

- Documentation at <https://www.powsybl.org/docs/getting-started> - need to coordinate with project on how to maintain this going forward, including
  - Functional documentation
  - Technical documentation
  - User documentation
- Usage examples at <https://www.powsybl.org/docs/user-stories>
  - [How to run a load flow with Powsybl ?](#)
  - [How to calculate capacity for a Regional Security Center ?](#)
  - [How to deal with topological views in a voltage level ?](#)
  - Advanced tutorials <https://www.powsybl.org/docs/tutorials/index.html>
- Port functional documentation from each page at <https://www.powsybl.org/>:
  - Grid Modeling
  - Grid Simulation
  - Grid Exchange Formats
  - Advanced Features