FutureGas
WP5

May 2018

WORK IN WP5

Work in WP5

All outputs from WP5 are available at the FutureGas Sharepoint – WP5 Outputs.

Work carried out in relation to WP5 includes:

- **Journal papers**
- **Conference proceedings**
- **Presentations**
- **Workshop**
- **Project collaborations**

Journal Papers

One paper has been submitted and one more is on the way.

- **Constructing aggregated time series data for energy system model analyses**
  Submitted to "Utilities policy"
  -Hardi Koduvere, Stefanie Buchholz, Hans Ravn

- **Simplification methods to overcome high complexity of energy system models**
  Will be submitted (August 2018)
  -Stefanie Buchholz, Mette Gamst, David Pisinger

Conference Proceedings

The conference ESCO 2017 was attended but work was not presented. A presentation has been accepted for the EURO 2018 conference and it is planned to submit to one more conference in the end of 2018/beginning of 2019. The topics of the presentations will be;

- **Time aggregation in Energy models**
  -Stefanie Buchholz, Mette Gamst, David Pisinger

- **Exact solution algorithms and approximation algorithms, heuristics, and meta-heuristics for combinatorial optimization problems**
  -Stefanie Buchholz, Mette Gamst, David Pisinger

Presentations

A long list of presentations have been given at different workshops, meetings, etc. Here are some of the more important listed.

- **"WP 6 highlights and future plans" – FutureGas Seminar, Helsingør 2017**
  - Stefanie Buchholz, David Pisinger

- **"Comparison of Time Aggregation techniques " - CITIES/FutureGas Joint Seminar, Copenhagen 2017**
  - Stefanie Buchholz

- **" Simplification methods to overcome high complexity of energy system models " Seminar, Copenhagen 2017**
  - Stefanie Buchholz

- **"Balancing solution quality with complexities when aggregating" Energinet.dk, Frederecia 2017**
  - Stefanie Buchholz

Workshop

All participants of this work package has participated in different workshops mainly at DTU or at Energinet.dk. Subject:

- **Gas markets**
- **Gas modelling in Energinet**
- **Investments in energy models**

Project Collaborations

Apart from the collaboration with the FLEX4RES project on time aggregation, a collaboration with the BEAM-ME project has also been engaged. The subject is speed-up strategies of energy models. A lot of meetings, workshops and presentations are included here. Subjects:

- **Time Aggregation**
- **Decomposition of Balmorel**
- **Parameter Tuning**
- **Solver related and conceptual speed-up strategies**

INFORMATION

Find all above articles, presentations and reports at FutureGas Sharepoint – WP5 Outputs

https://share.dtu.dk/sites/FutureGas_142450/WP%204%20%20Gas%20in%20the%20integrated%20energy%20system/Forms/AllItems.aspx?RootFolder=%2Fsites%2FFutureGas%5F142450%2FWP%204%20%20Gas%20in%20the%20integrated%20energy%20system%2FWP4%20Outputs&FolderCTID=0x01200044B6220B1A9ADB4EAC6B819C74664D8F&View=%7B9D045709%2D3586%2D4EE2%2D8BCA%2D24AAB4D5F4D9%7D