## Group Sheet

## Division of labour

The thematic breakdown of the work is as follows :

- 1. Introduction and electricity market (Jens)
- 2. Data Wrangling (Nils)
- 3. Benchmark Models (Nils)
- 4. Extended Expert Model (Jens)
- 5. Seasonal Model (Jens)
- 6. Model with external regressors (Nils)
- 7. Online learning model (Nils)
- 8. Conclusion (Jens)

Online Learning:

Recursive Least Squares is an additional model with OLS.

We estimated the model using the expert model with 2 years

## Others:

We should think of problems due to an non-full testing/prediction year.

Why did we decide that instead of one year train and the rest as test would not be better than test all

models with less than a full year.

Why did you even add the MAE errors?

One turbine could roughly produce 2 MW

Comments and Questions:

Why is it implausible/plausible to include the renewables in the model?

Connections to the neighbour countries compared

Have a quiet small country with bigger neighbour you should consider those imports of renewables.

We did not include gas because that is information which should not be avaible.

Lagged information for day before the unction so last information of 17:30

Marginal power plants might set the price in very heavy loaded hours.

Which other could have be used to improve the models? Why did you use 14 lags?

Why didn't you preform the Diebold-Mariano-Test for the recursive model?

All estimations are based on least squares this is why we compare RMSE values?

Does outliers have punched into up the MAE/RMSE?

Computational time is negliable.

Lasso could be better because of varibale selection. We did not implement Lasso.

Talking about lags you should add 14 or 15 to check for weekly structures.

We choose the b-spline of 6. What kind of b-spline do you use? How many parameters.

Reduce one due to singularity

What is the b-spline order?