



Sigem Smart Grids and Energy Markets

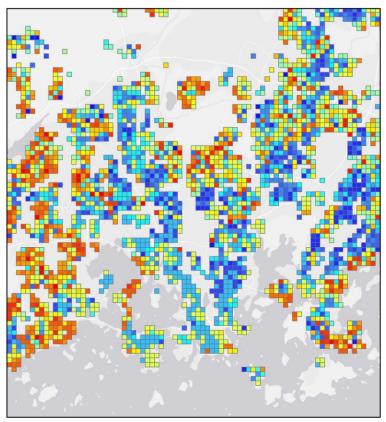
Regional PHEV adoption modelling using socio-economic & HEV adoption data

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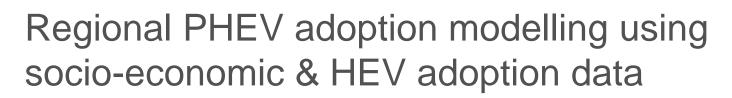
Regional PHEV adoption modelling using socio-economic & HEV adoption data



An example of a map representing the anticipated PHEV adoption. Warmer colour means higher adoption. (the figure might not reflect the result given by the final model).

- Matlab program for ranking different geographical areas by their features that strongly correlate with HEV adoption.
- Because of the similarity between HEV and PHEV, the same model estimates the upcoming PHEV adoption.
- The results can be utilised in strategic network planning to prioritize investments as a part of more specific evaluation.





• The data used:

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- 250mx250m socio-economic grid data (Statistics Finland)
- HEV adoption data (TraFi)
- The areas are segmented by their socio-economic/demographic features such that the adoption can be predicted with good accuracy
- The program is partly based on methodology discussed in:
 - Saarenpää, J., Kolehmainen, M., Niska, H. Geodemographic analysis and estimation of early plug-in hybrid electric vehicle adoption. 2013. Applied Energy. (in press)

