

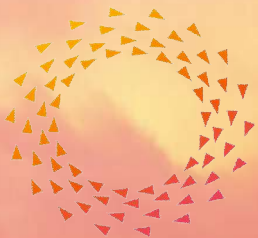
## WP2

# On Frequency stability in the future renewable Nordic power system with gas sector integration

8<sup>th</sup> researchers' seminar

Jussi Ikäheimo (VTT)

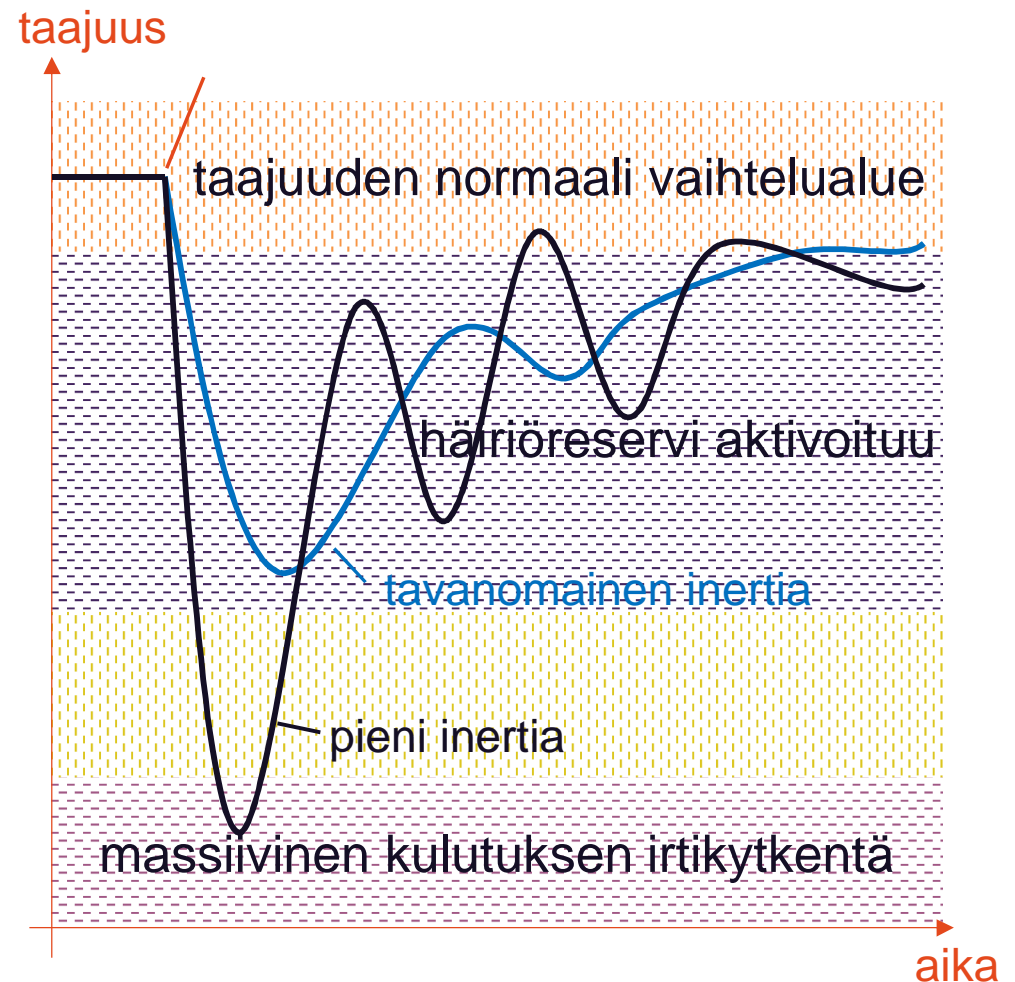
Juha Kiviluoma (VTT)



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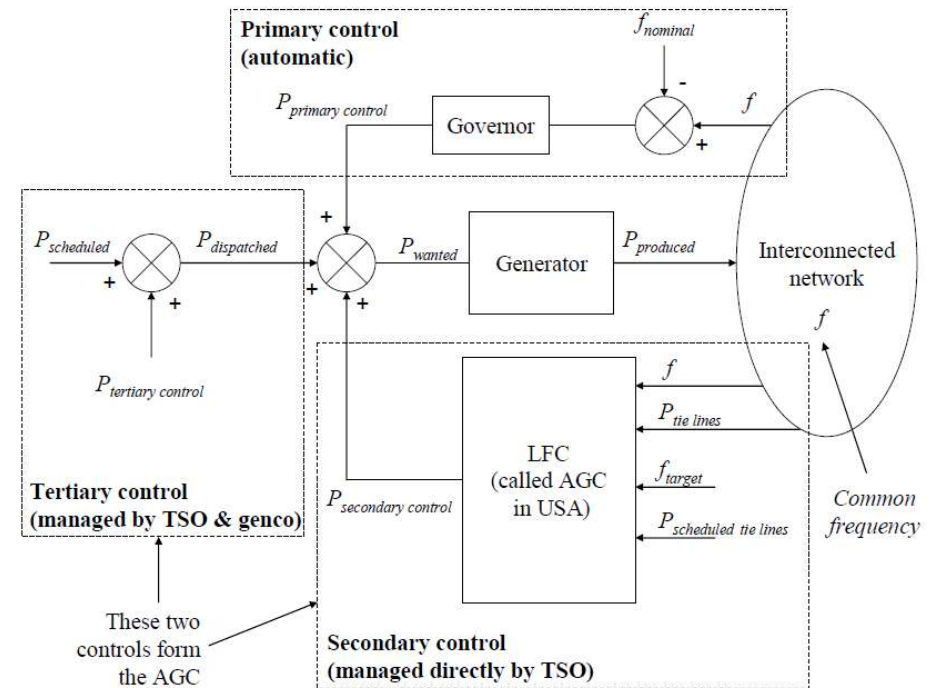
# Introduction

- Renewable power generation affects system inertia
- Study the behaviour of grid frequency in low-inertia situations
- Electrolysis as stabilizer



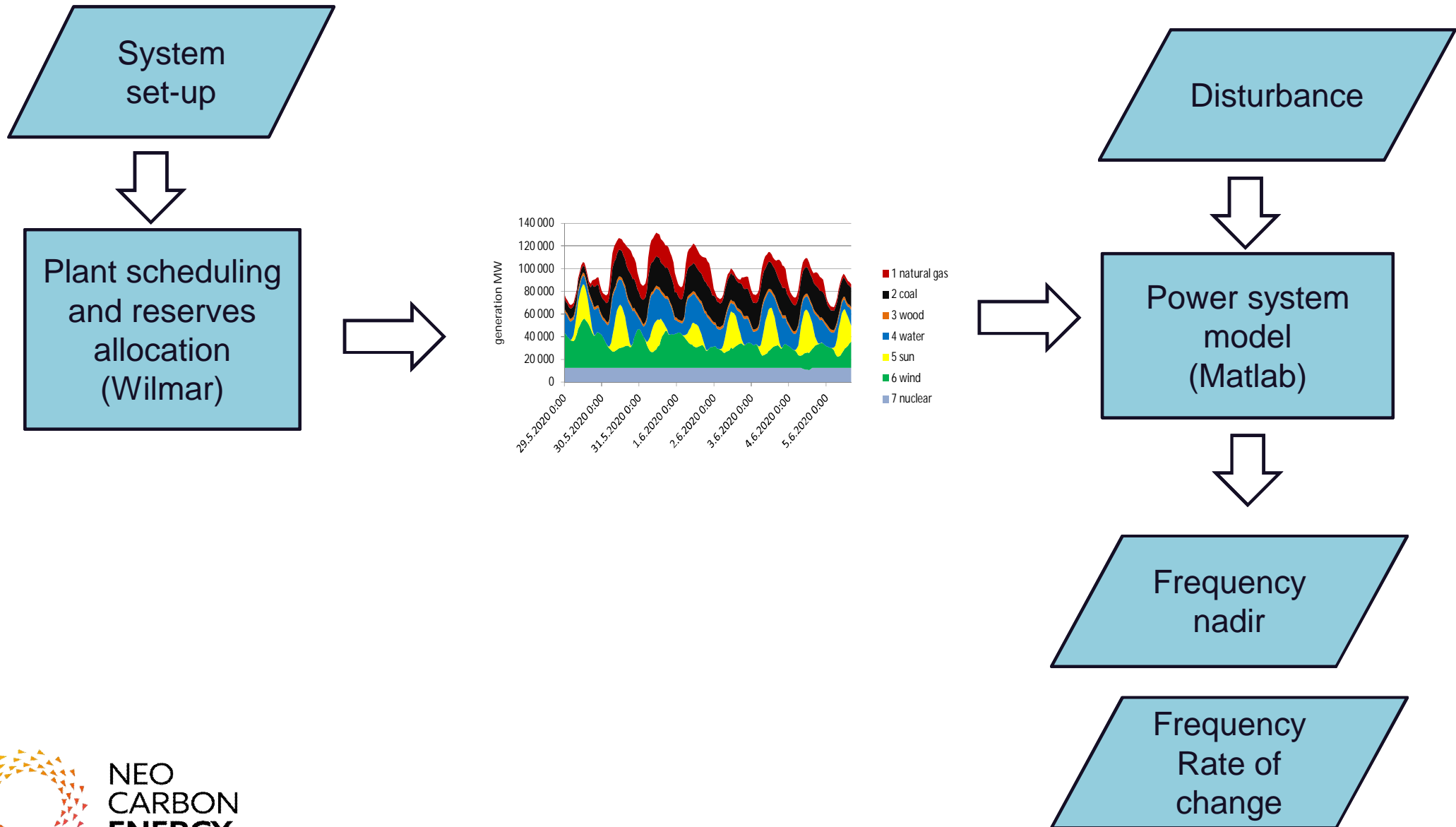
# Scope of work

- Sudden power loss because of disconnection of power plant or interconnector
- In Nordic context we concentrate on the frequency containment reserve, which is divided into disturbance and normal operation reserve
- Disturbance reserve critical
- All types of power plants included

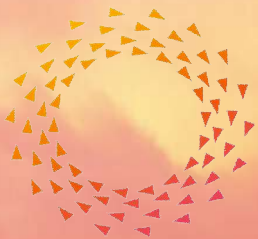


Framework for frequency regulation in UCTE

# Modeling tools



Thank you



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