



## Modelling improved resilience of military base being connected to nearby biogas plant with biogas storage

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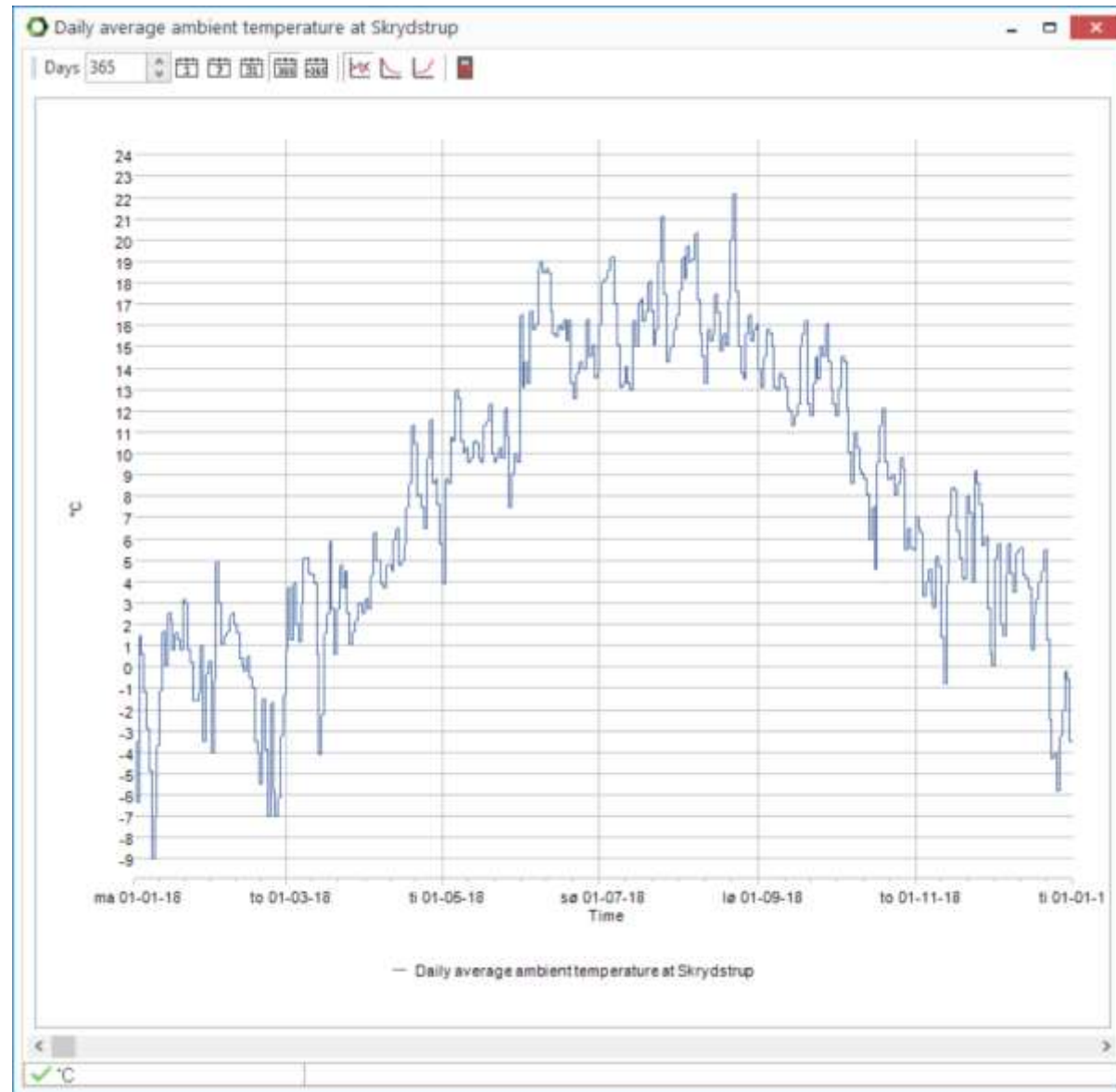


# Agenda for the presentation

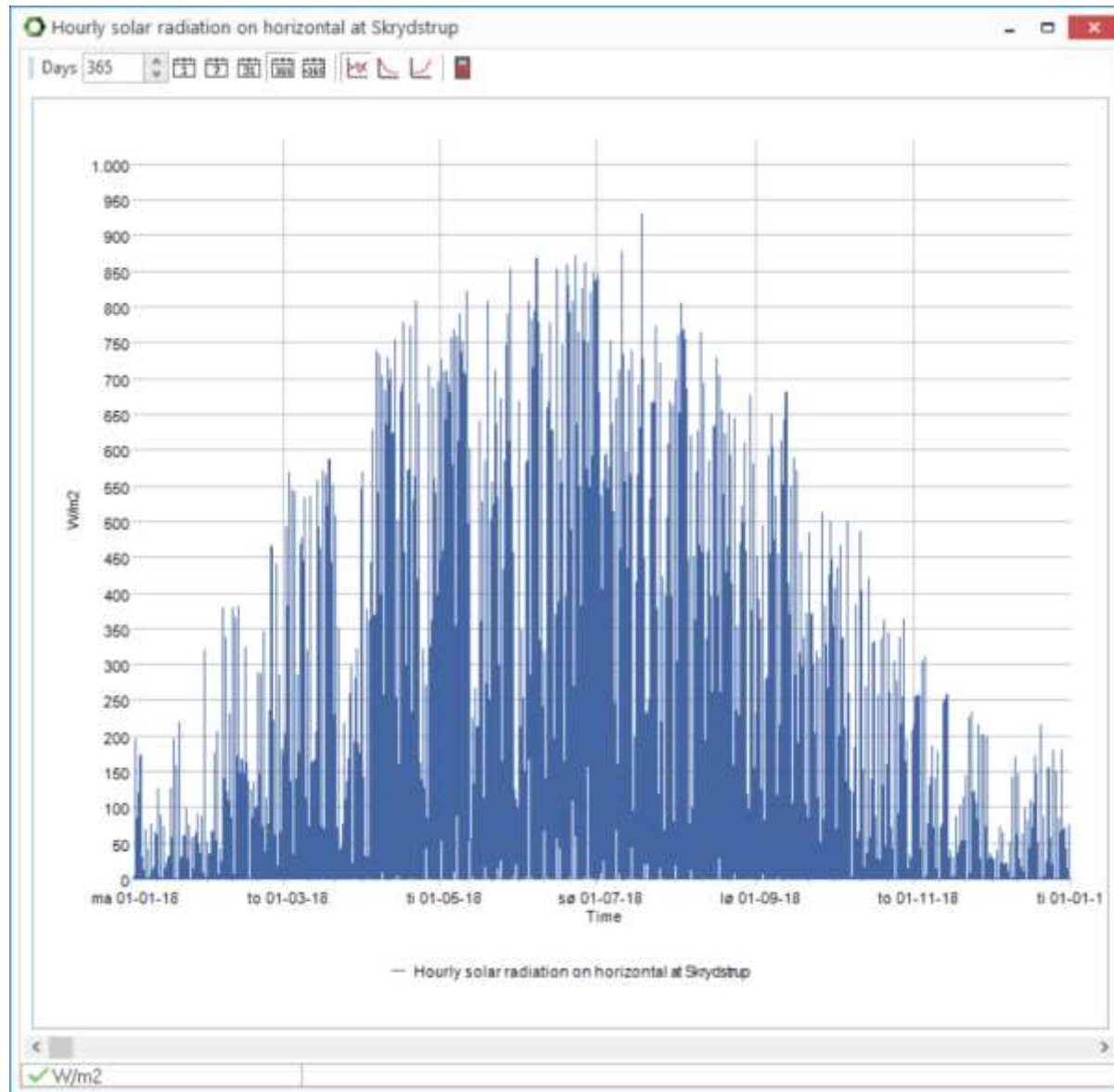
- Example of island operation of Air Base Skrydstrup in Denmark
- Example of Nymindegab Military Camp in Denmark,
  - operated in island mode to show resilience in times of crisis
  - market based time in peacetime

# Example of island operation of Air Base Skrydstrup in Denmark

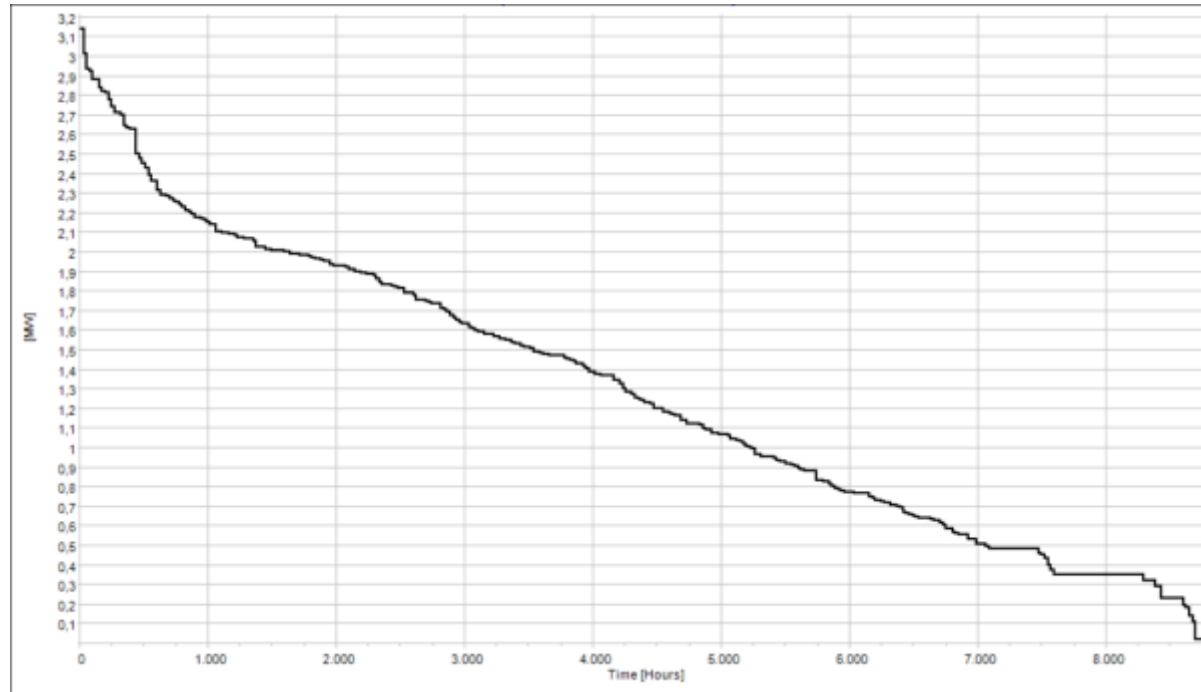
## Climate conditions at Skrydstrup



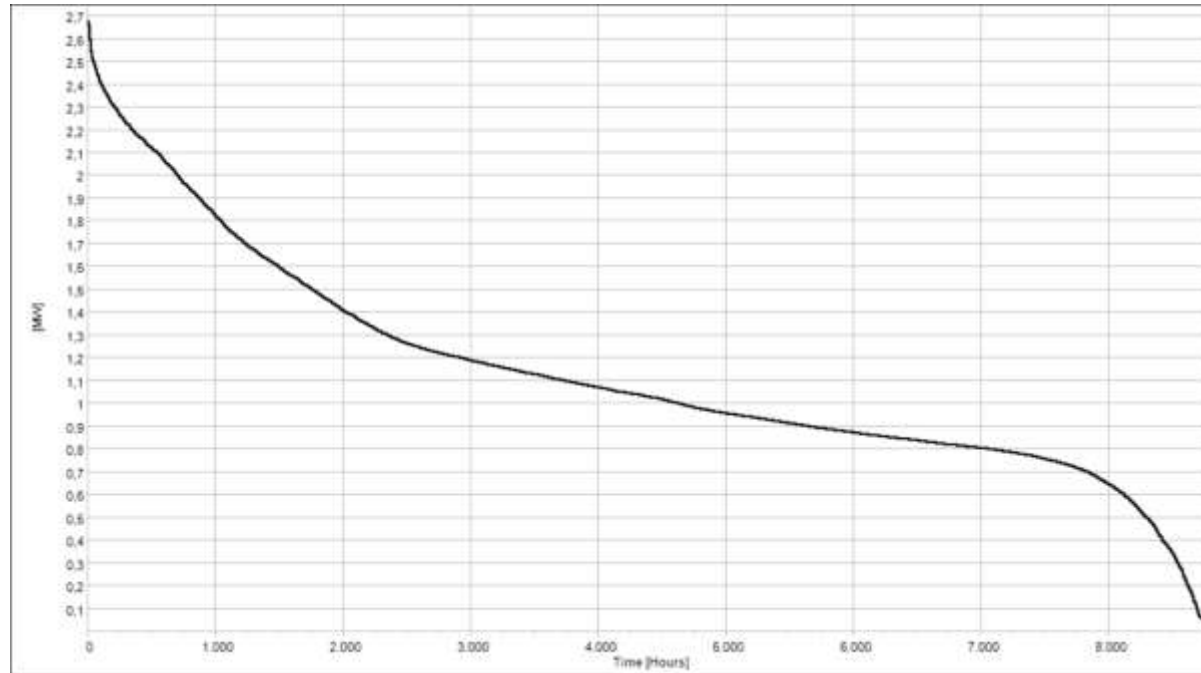
## Global radiation at Skrydstrup in an average year



## Duration curve for heat demand at Skrydstrup Air Base



## Duration curve for electricity demand at Skrydstrup Air Base



# Resilience in a winter situation at Skrydstrup Air Base operated electrically in island mode with biogas and battery storages





# Resilience in a summer situation at Skrydstrup Air Base operated electrically in island mode with biogas and battery storages



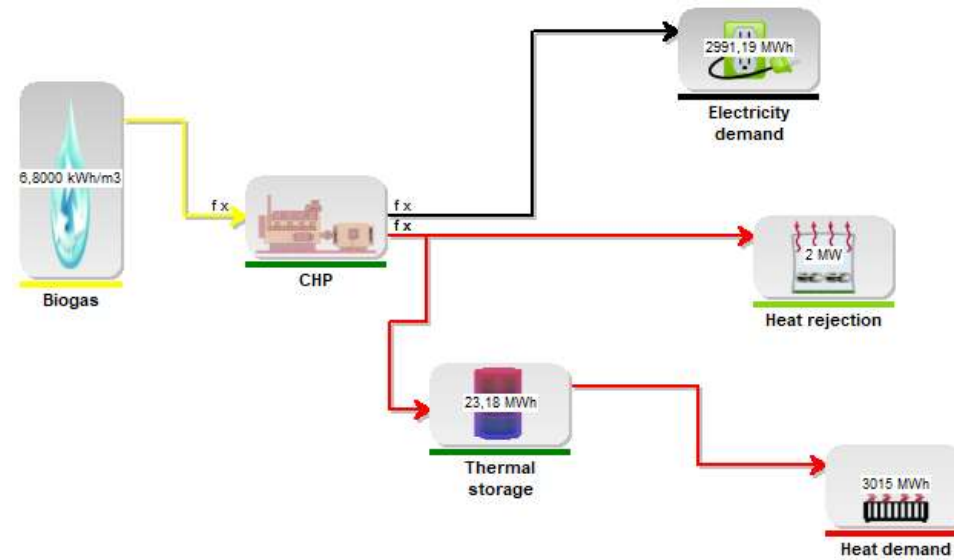
# Example of Nymindégab Military Camp in Denmark both operated in island mode and market based



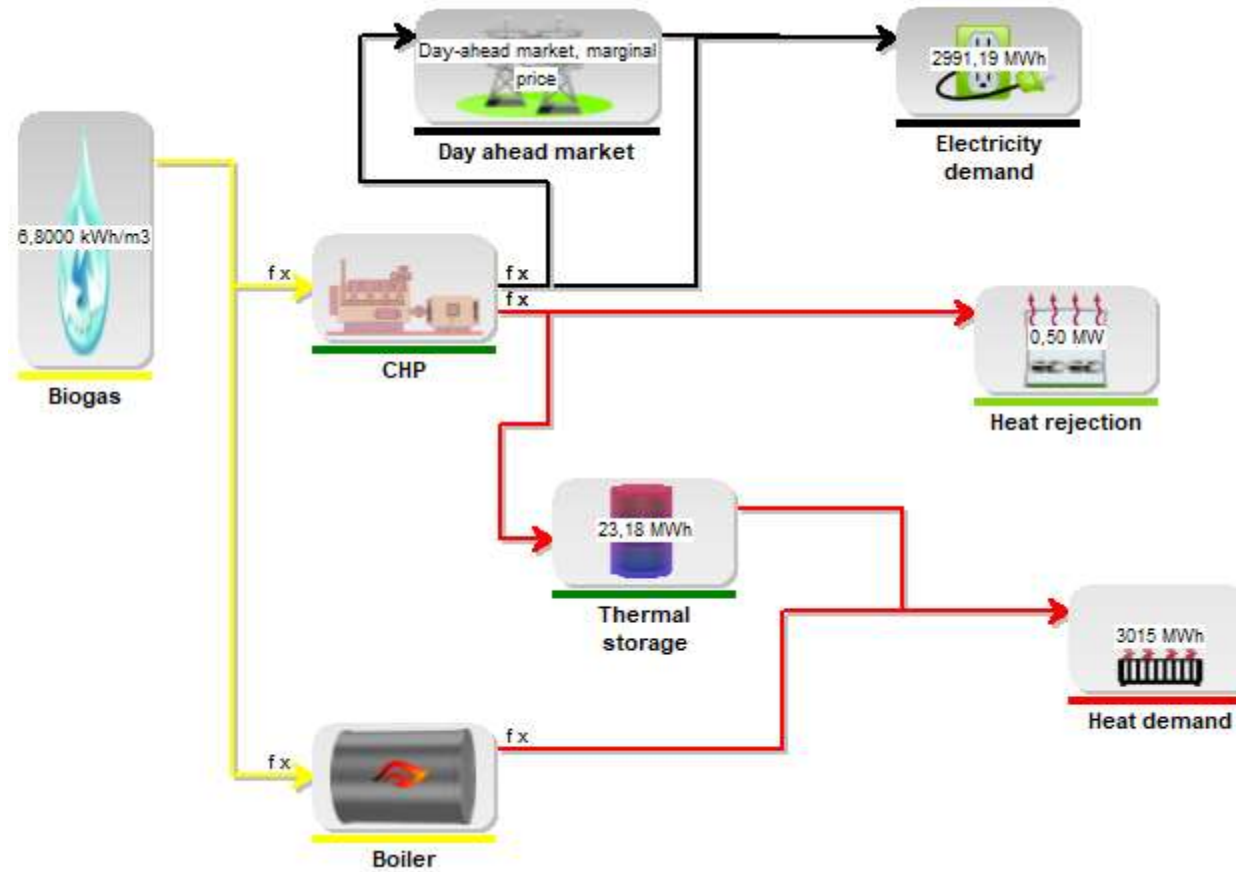
Blåbjerg Biogas plant is situated 10 km from Nymindesdal Military Camp, connected with a biogas pipe to the camp



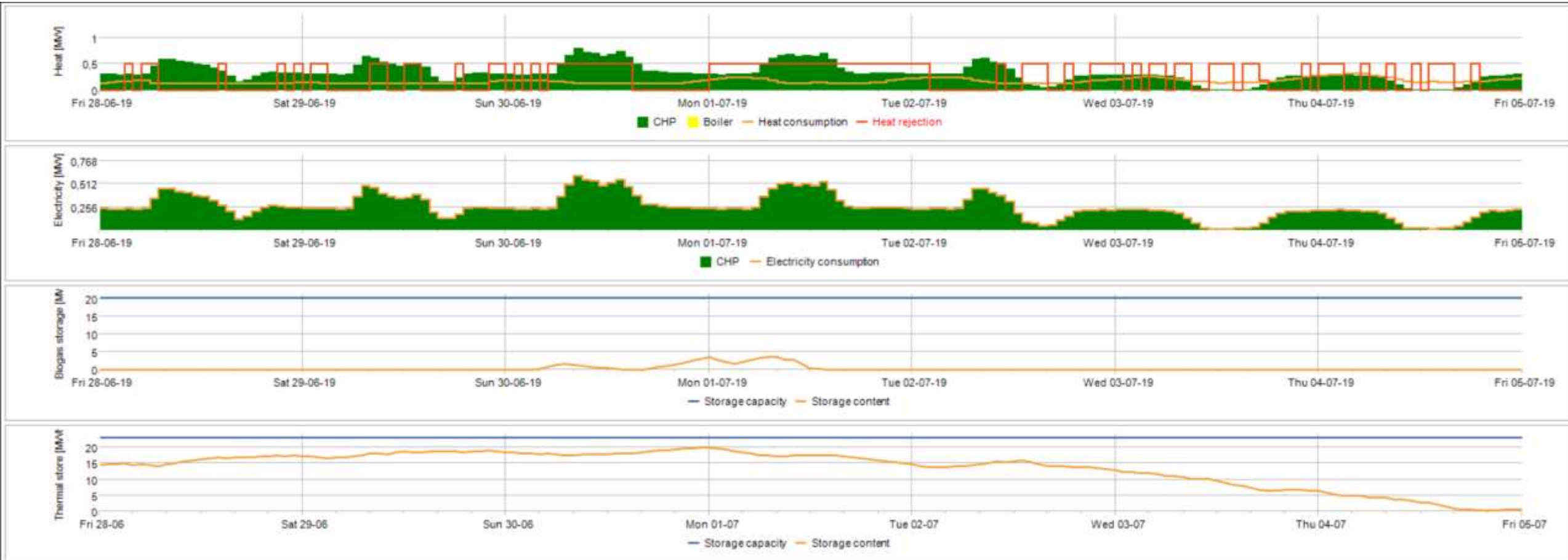
## A resilient energy system for Nymindegab Military Camp operated in island mode



# A resilient energy system for Nymindgab Military Camp operated market based



# The CHP at Nymindegab Military Camp simulated in 7 days in June, covering both electricity and heating demand when operated in island mode



# The CHP at Nymindesgab Military Camp simulated in the same 7 days in June, covering heating demand providing electricity market based with private wire operation of CHP



Thanks for the attention!



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