

# mySMARTLife Helsinki Viikki Environmental House

Correct use of heating energy  
using smart thermostats

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# MySmart Life areas in Helsinki



Zone 1 Merihaka

Zone 2 Kalasatama

Zone 3 Viikki

Zone 4 Helsinki (whole city)

+ Korkeasaari

# mySMARTLife partners in Helsinki / VIKKI



Building owner  
Tenant



District Heat Provider  
Demand Response Signal



Project management



Human comfort measurements  
Other measurements



Room-by-room heating control  
Heating demand response

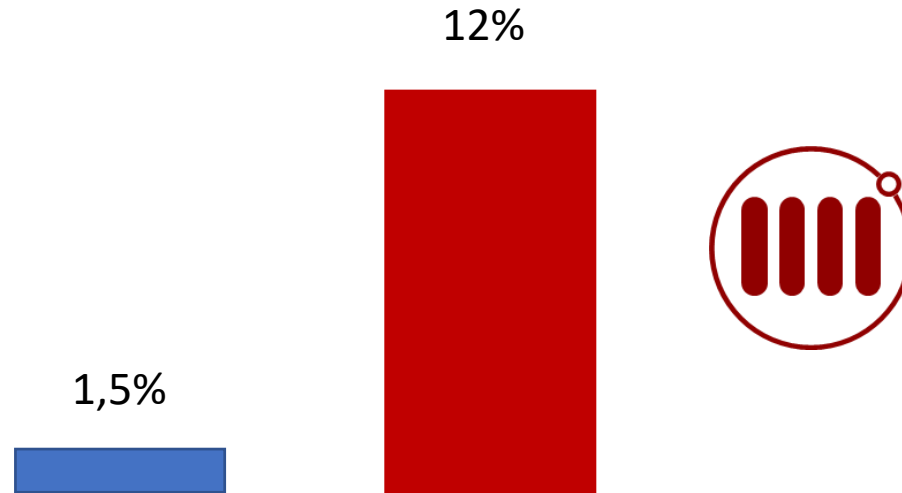


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# Fourdeg Smart Energy™



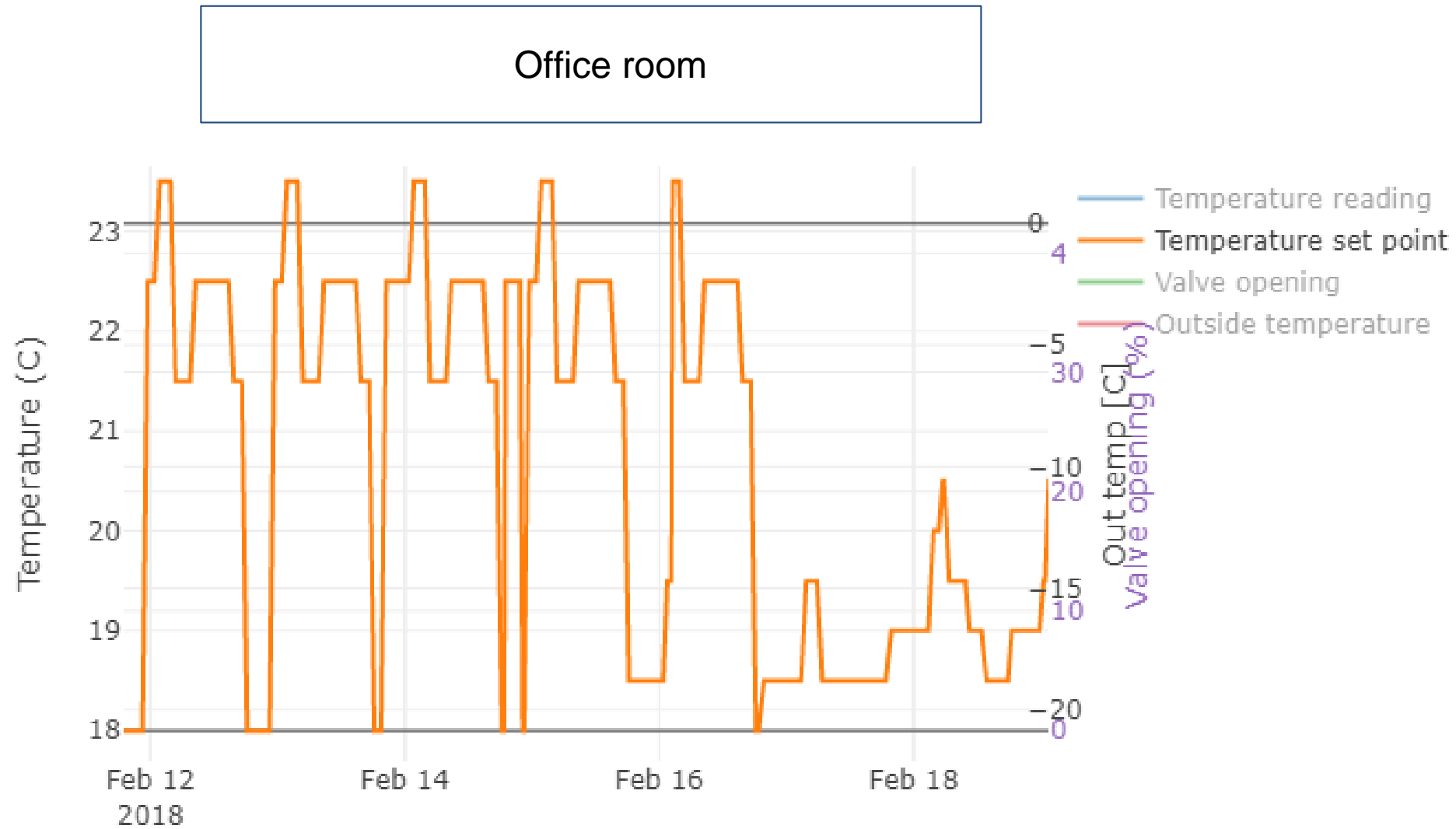
Demand Response with heat exchanger control

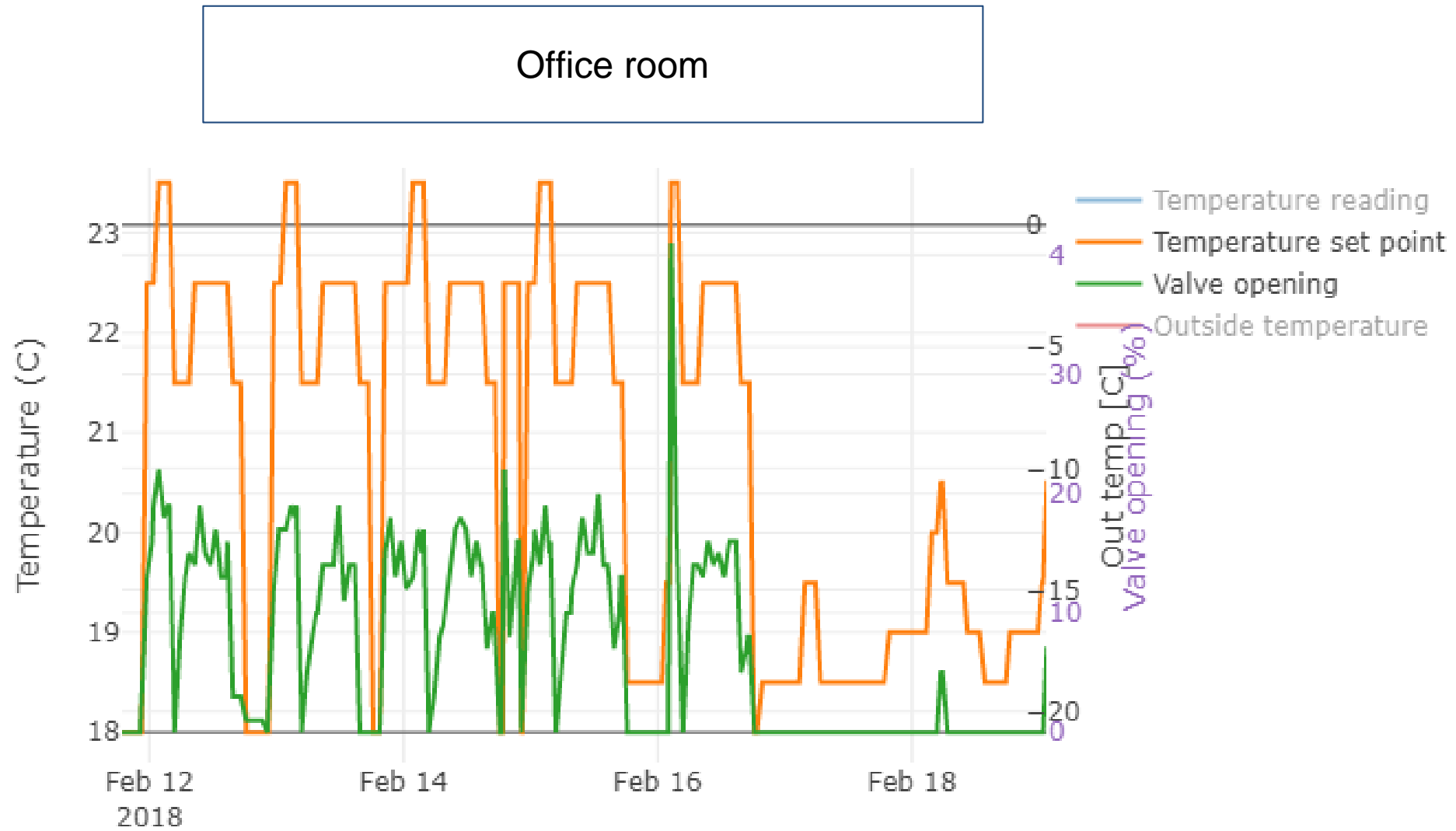
- Can only decrease heating
- Can treat room as an average only

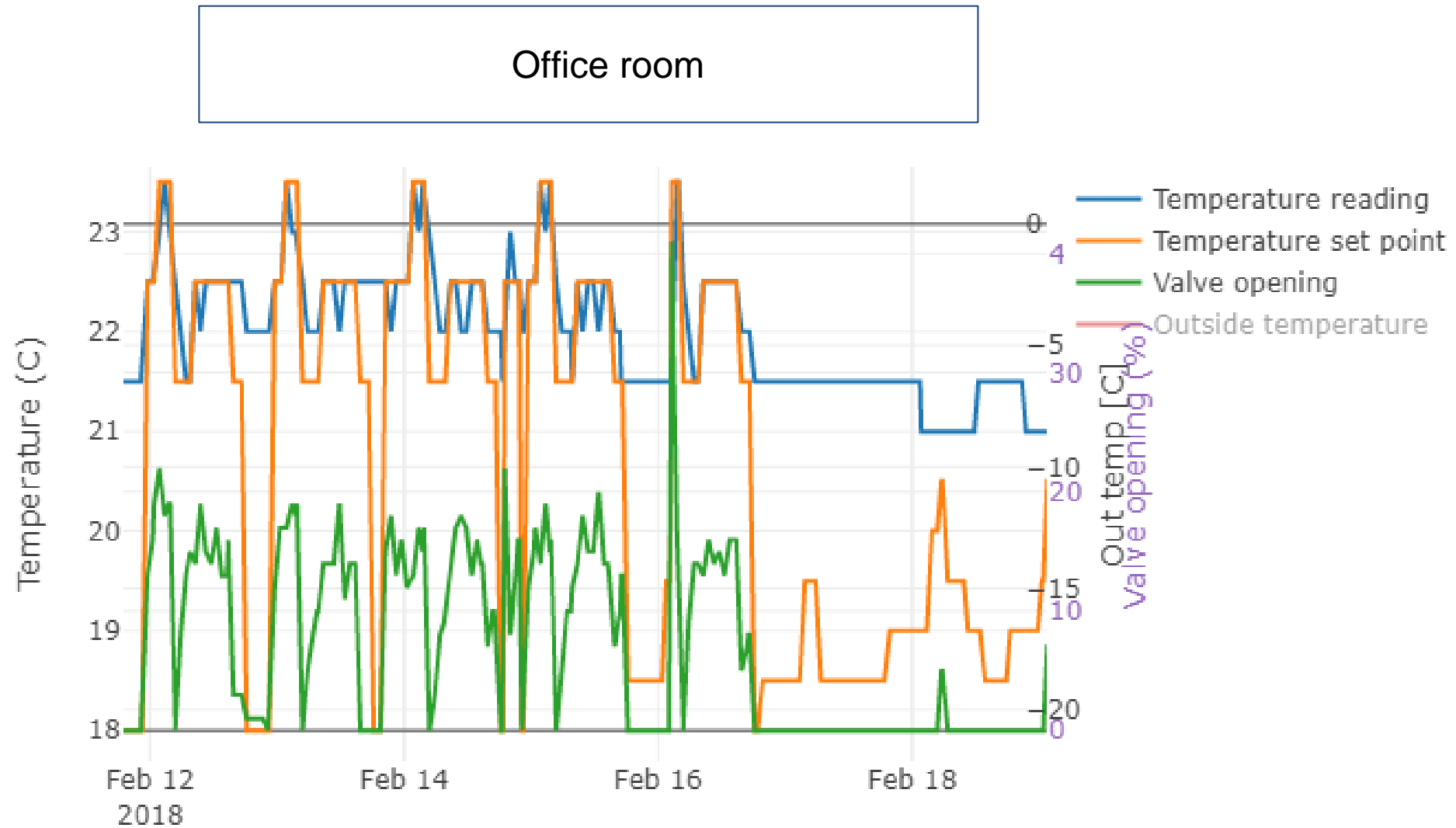
Demand Response with radiator thermostat control

- Can increase and decrease heating
- Can treat rooms individually

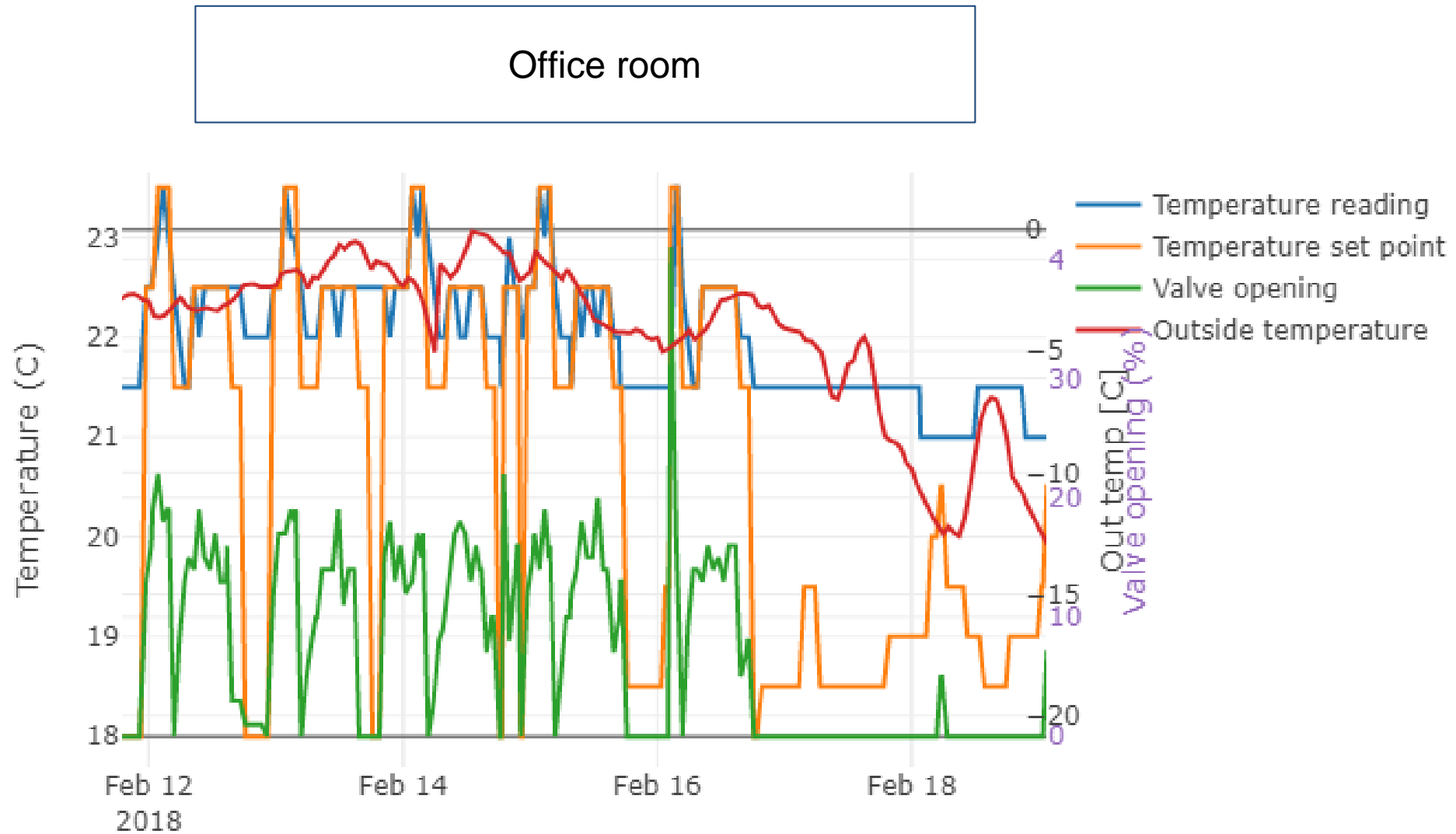












# MySmart Life Viikki, Demand Response Results

Achieved so far:

- Easy and feasible to implement to office buildings
- Human Comfort improved: 66 % favourable -> 96% favourable
- No GDPR issues
- 10% energy efficiency gain of district heating in "almost zero" energy building

To be studied further in the remaining project

- Short term power loading / saving capability limits
- Impact to emissions

