



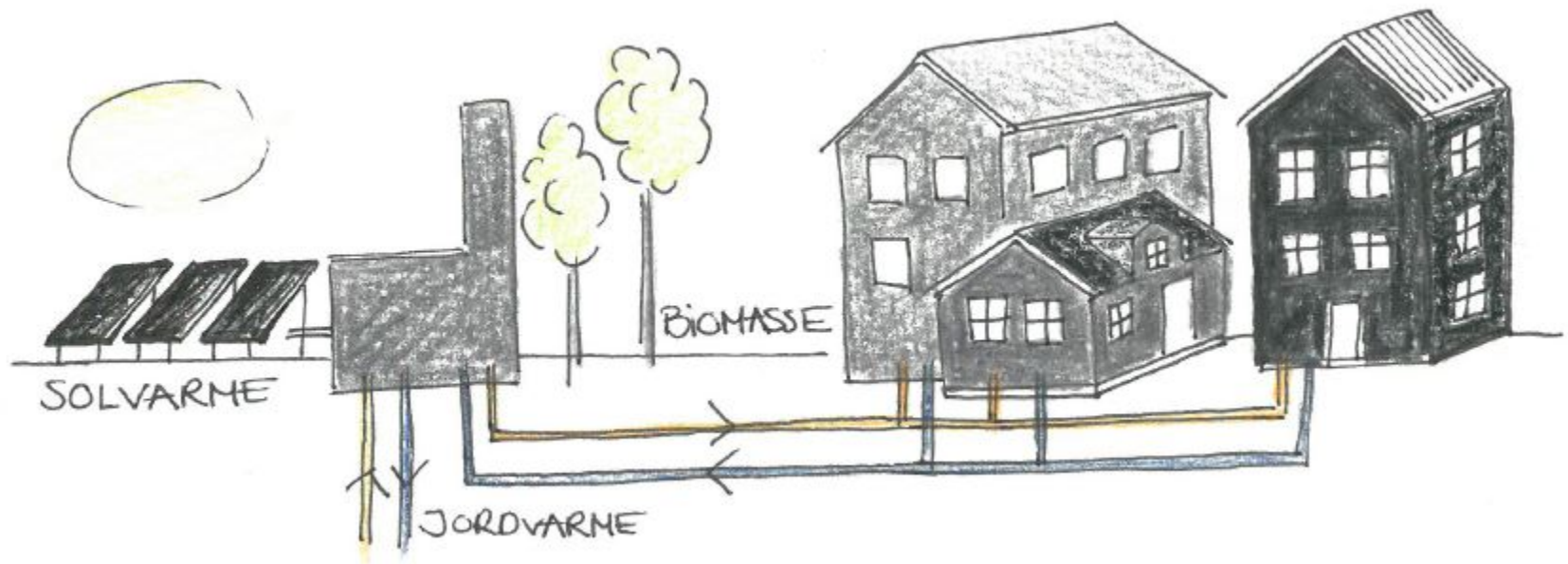
# 4. generations fjernvarme og lavtemperatur-opvarmning

**Dorte Skaarup Østergaard**

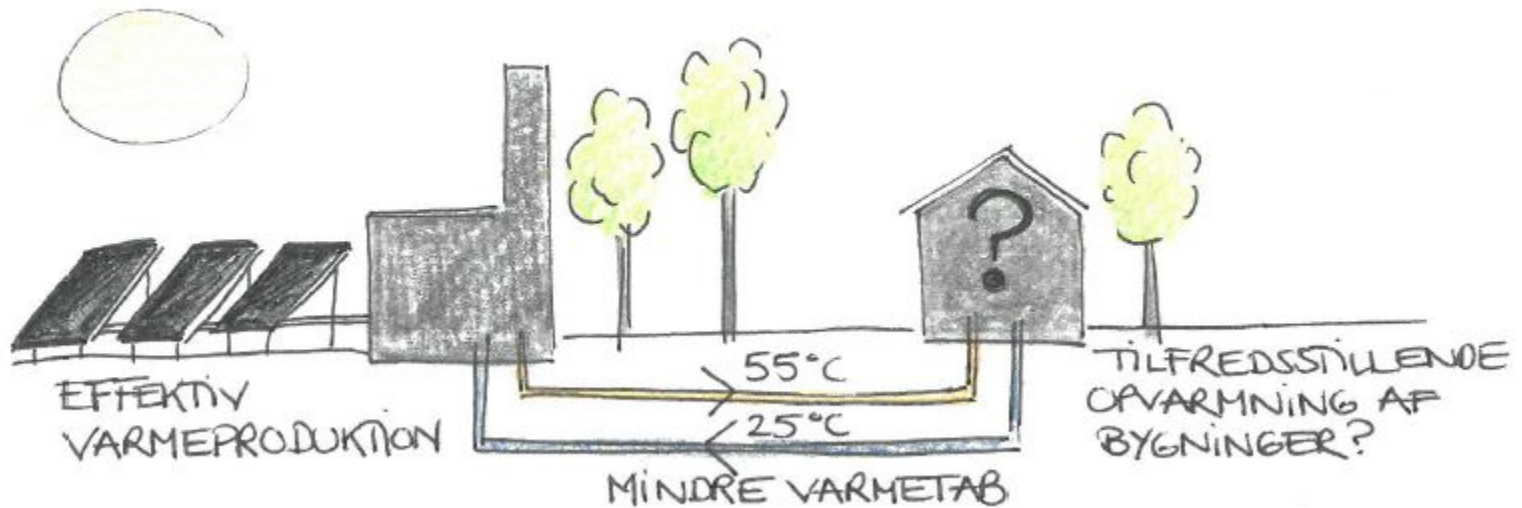
Ph.d.-studerende i lavtemperatur-fjernvarme

Danmarks Tekniske Universitet

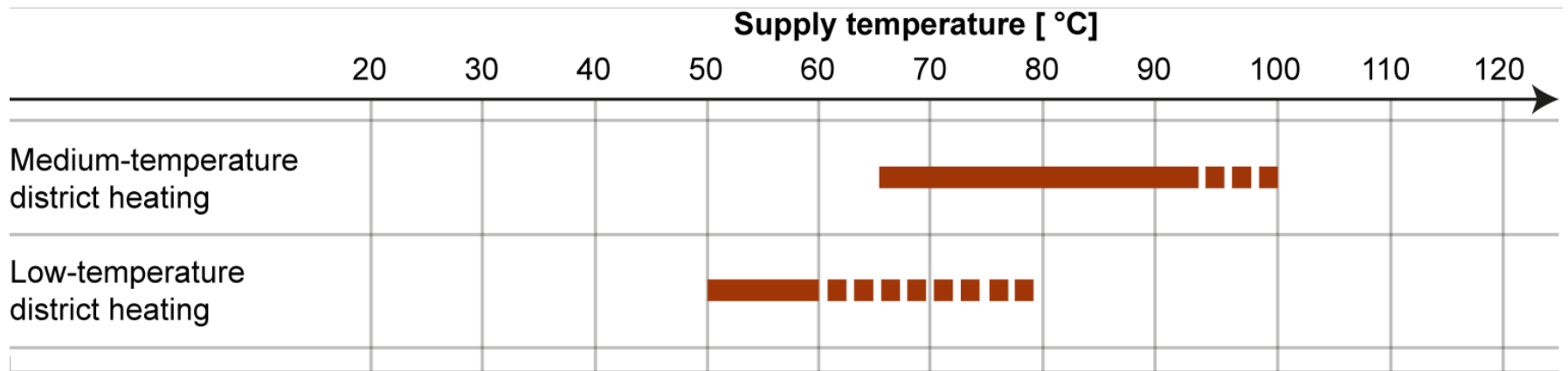
# Fremtidens varmesystem



# Lavtemperaturfjernvarme

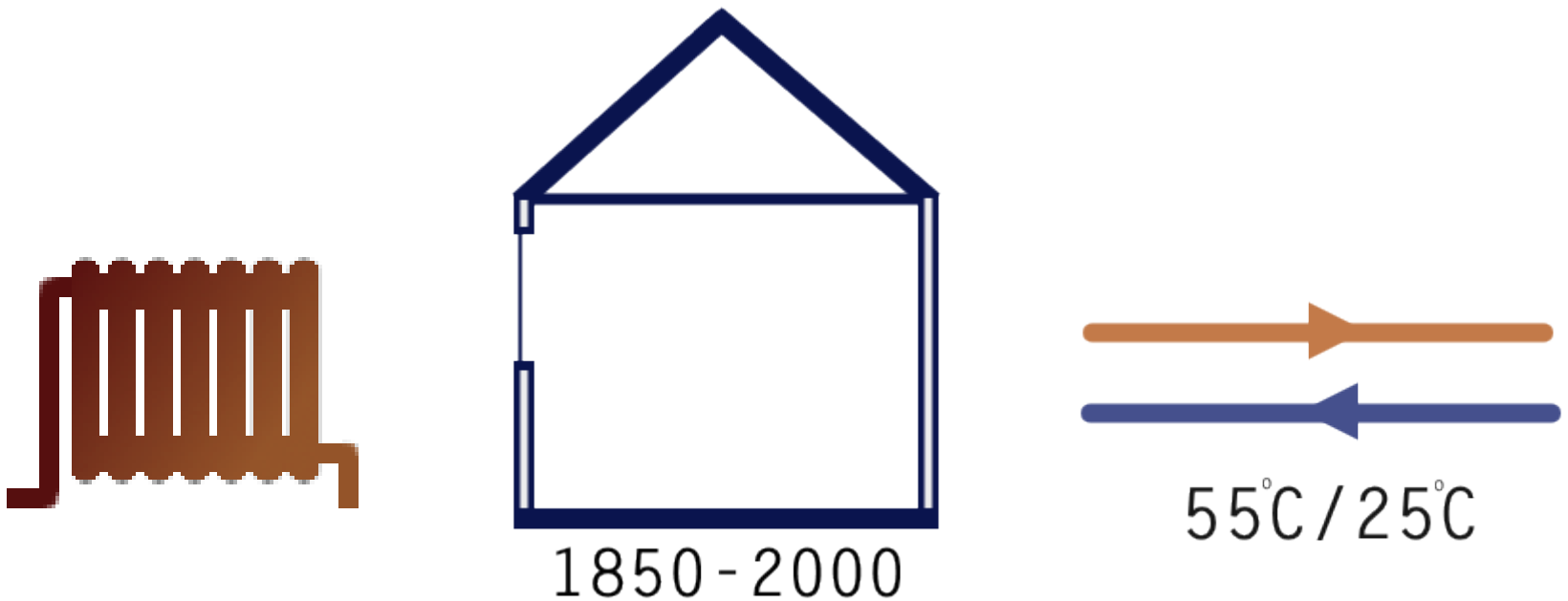


# Lavere temperaturer



*Figure from the article "Space heating with ultra-low-temperature district heating – a case study of four single-family houses from the 1980s" by D. Østergaard and S. Svendsen*

# Hvordan kan vi levere...



...Rumopvarmning til eksisterende bygninger ved brug af lavtemperaturfjernvarme

# Rumopvarmning - hvad skal der til?

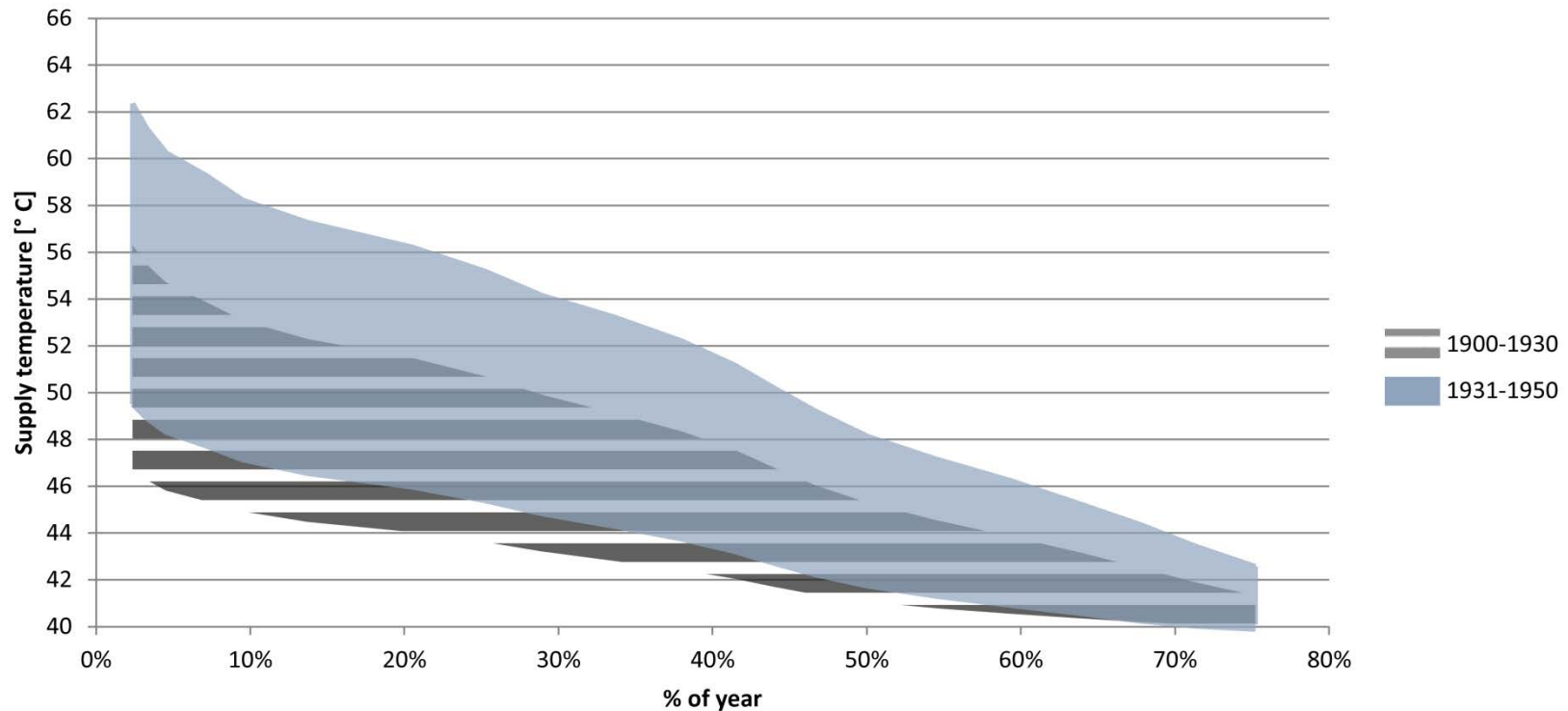
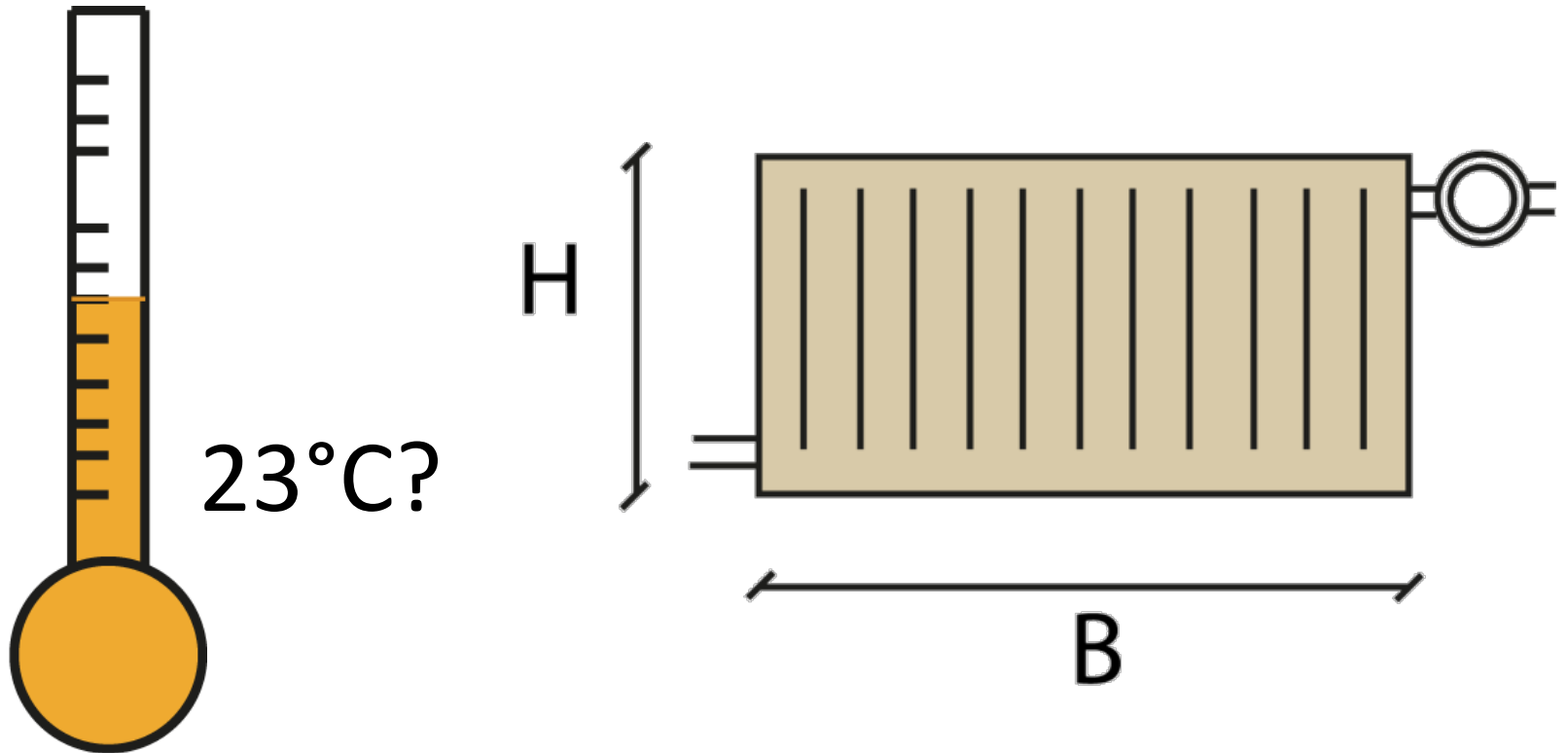
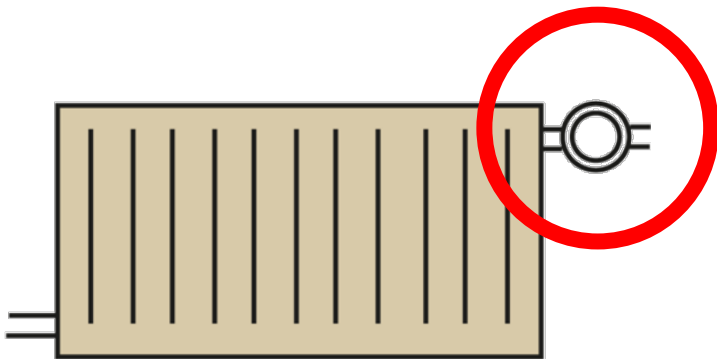


Figure from the article "Theoretical overview of heating power and necessary heating supply temperatures in typical Danish single-family houses from the 1900s" by D. Østergaard and S. Svendsen

# Rumopvarmning - hvad skal der til?



# Rumopvarmning - hvad skal der til?



- Ingen natsænkning
- Velfungerende termostater
- Brug termostaten rigtigt
- Brug alle radiatorer
- Luk døren til soveværelset



# Tak for opmærksomheden



Varmens dag, Viborg d. 5 februar 2017