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Effektiv forebygging av *Legionella*

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Nordiskt Vattenskadeseminarium

2024-08-29





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Dagens tema

- Livssyklus til legionellabakterien
- Risikofaktorer
- Erfaringer fra SESSILE



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Krav til vanninstallasjoner

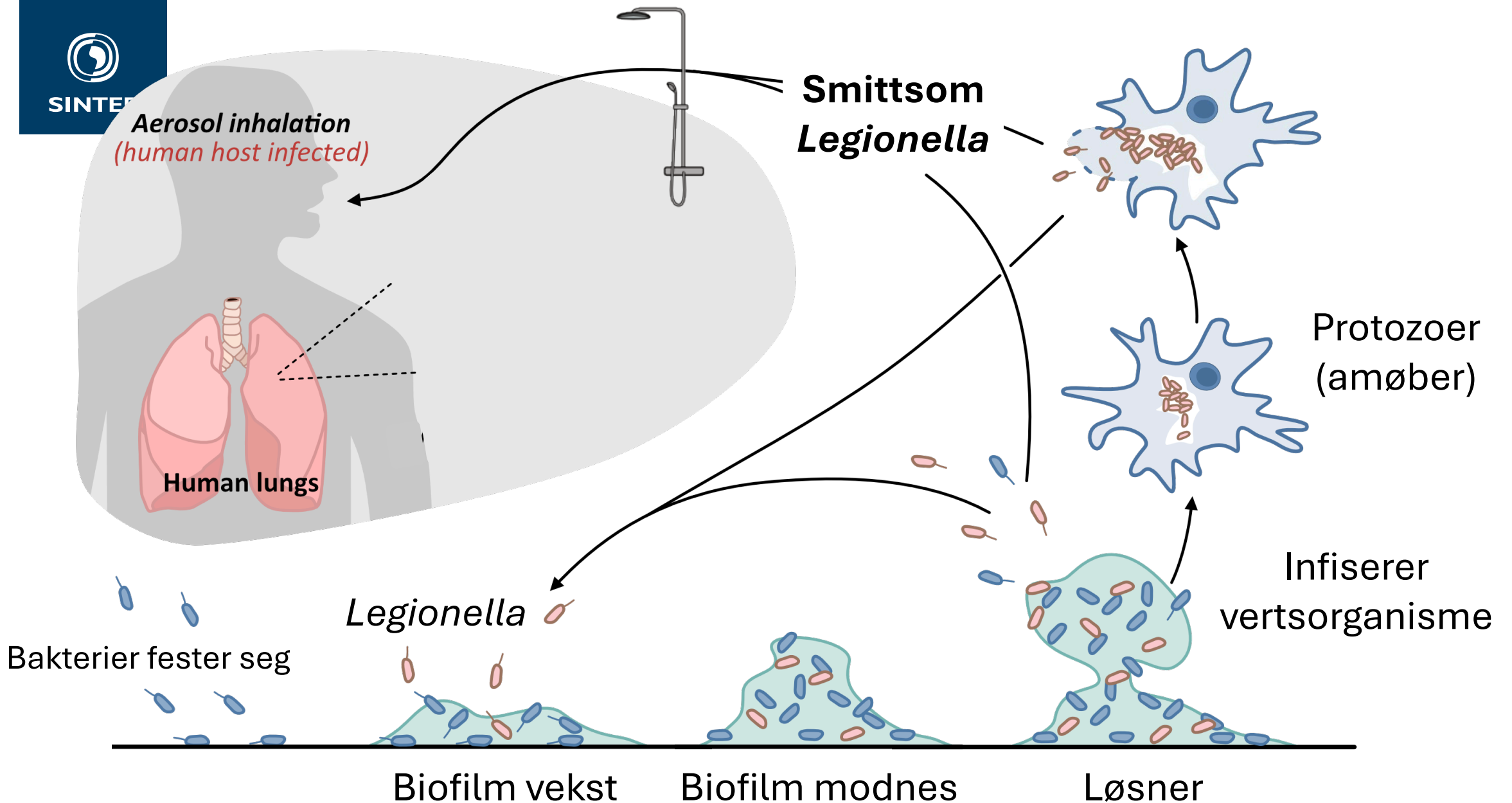




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A close-up photograph of a petri dish held by a hand wearing a blue nitrile glove. The petri dish contains a bacterial culture on a light-colored agar surface. The culture is organized into several distinct patterns: a grid of small, circular colonies on the left, and several vertical streaks of colonies on the right. The background is blurred, showing a laboratory setting with various equipment and containers.

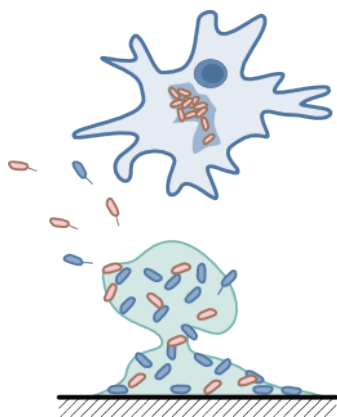
*Hvordan kan vi effektivt
forebygge bakterievekst?*



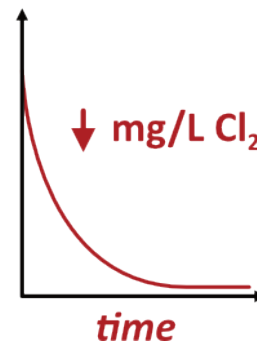


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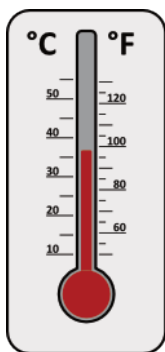
Risikofaktorer for legionellavekst



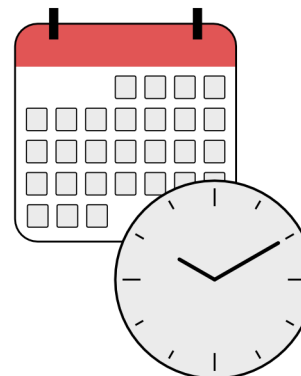
Bakterier & vertsorganismer
Næringsstoffer



**Rester av
desinfeksjonsmidler**



Vanntemperatur
20 – 50 °C



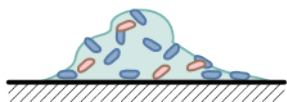
Stillestående vann
Tid mellom tapping



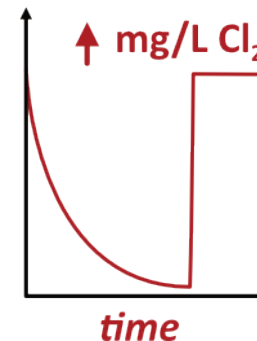
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Formål med forebygging

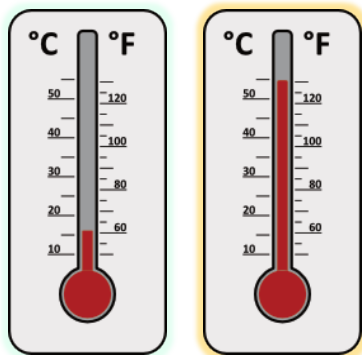
Fjerne biomasse



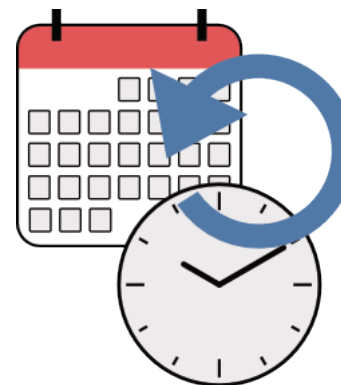
Fylle på desinfeksjonsmidler



Regulere vanntemperatur
<20 eller >50 °C



"Nullstille" vann





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Prosjektering &
bygging



Forbruk &
Drift

Overvåkning



SESSILE



Boligbygg Oslo KF
Oslobygg KF





Mål

Vannkvalitet

Miljøavtrykk



Brukervennlighet

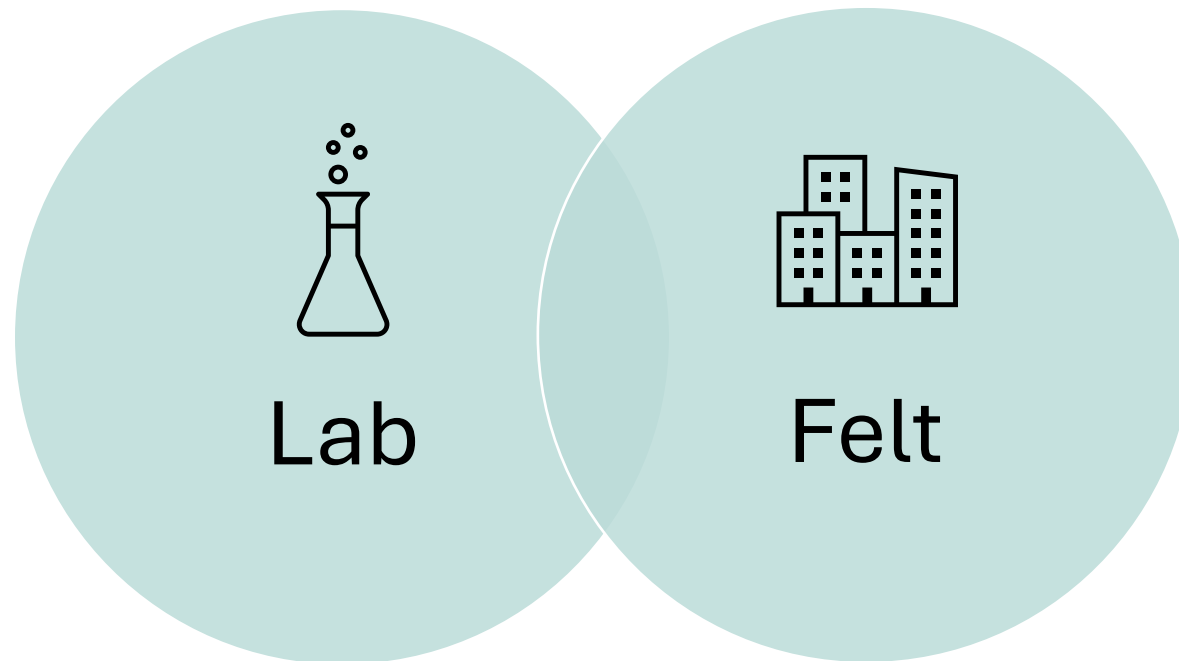


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Forskningsspørsmål

- *Hva er en sikker rørinstallasjon?*
- *Hvordan påvirker bevegelse av vann legionellvekst?*
- *Hvor mange vannprøver bør tas, hvor hyppig og fra hvilke steder?*

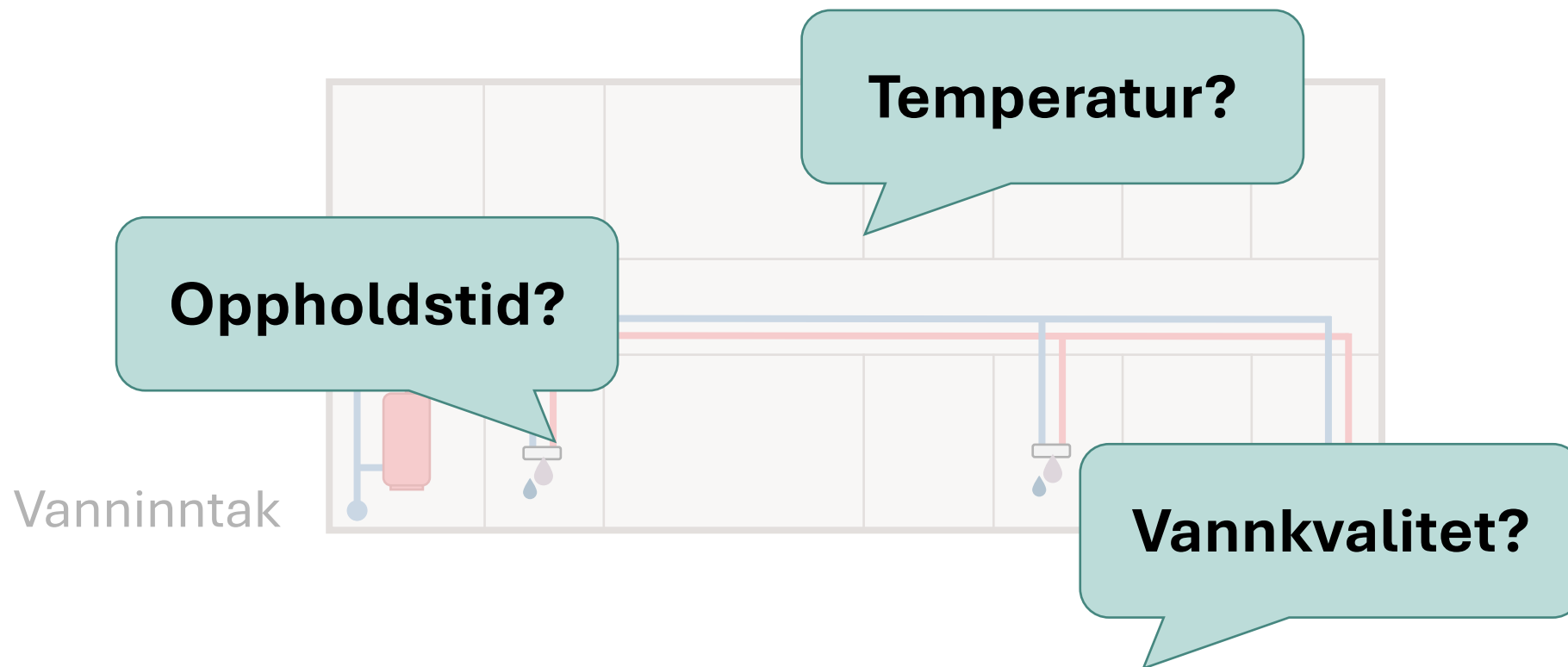
Metode

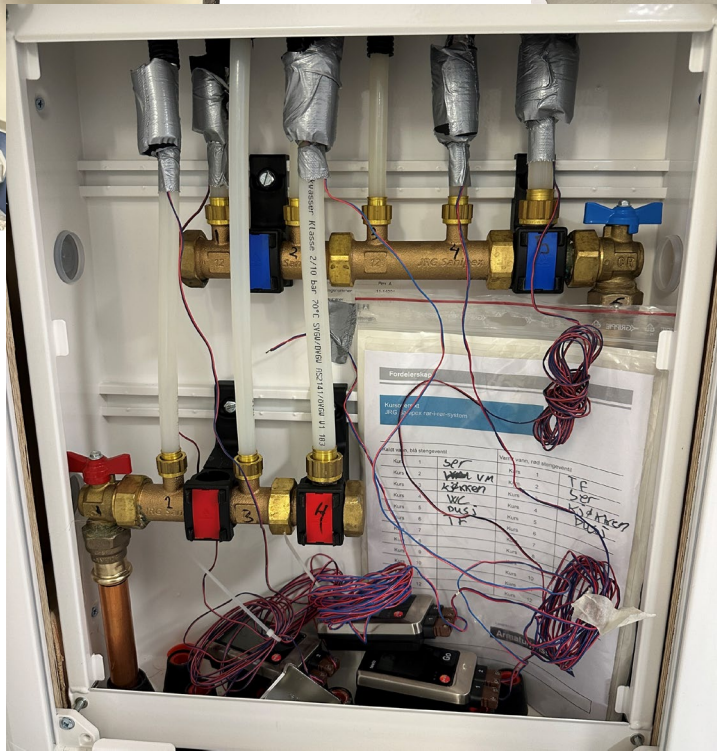




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Feltstudier

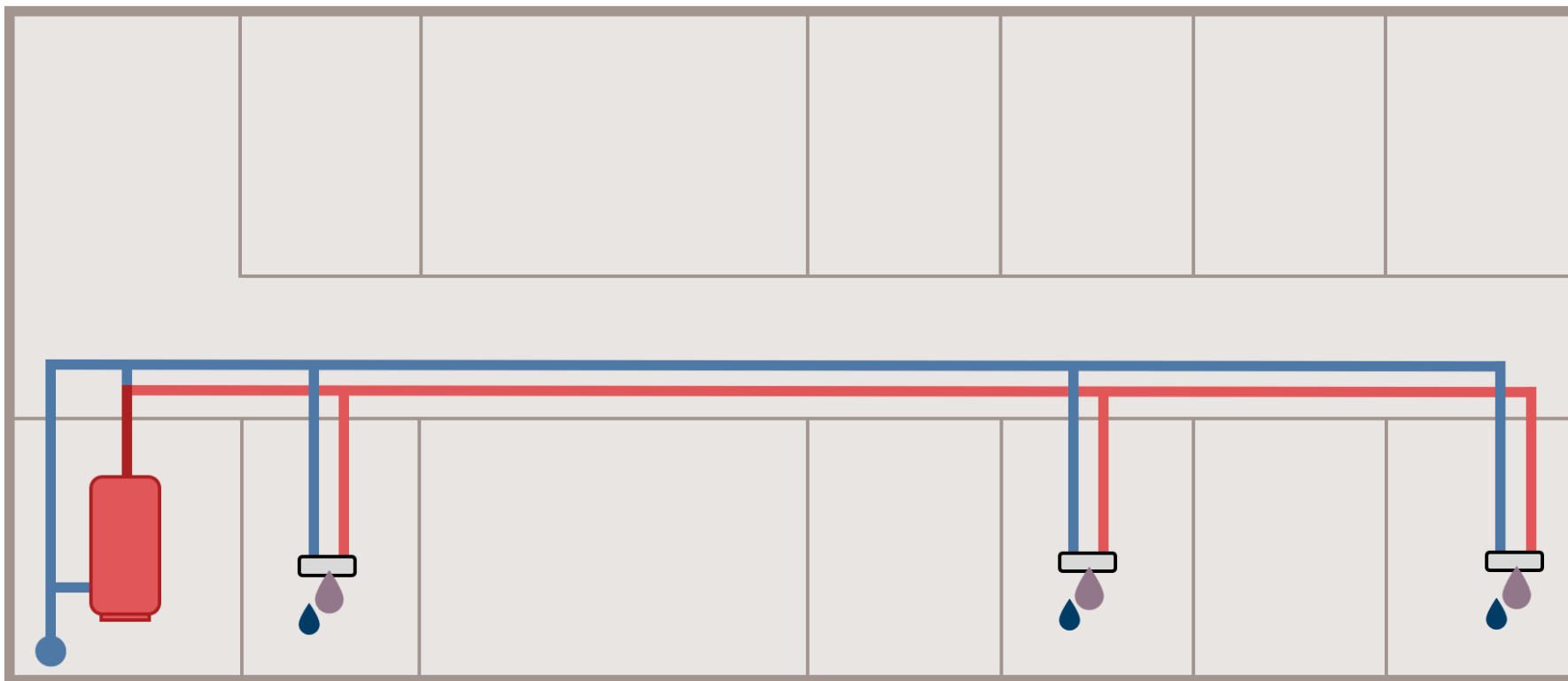






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Feltstudier



55 – 65 °C

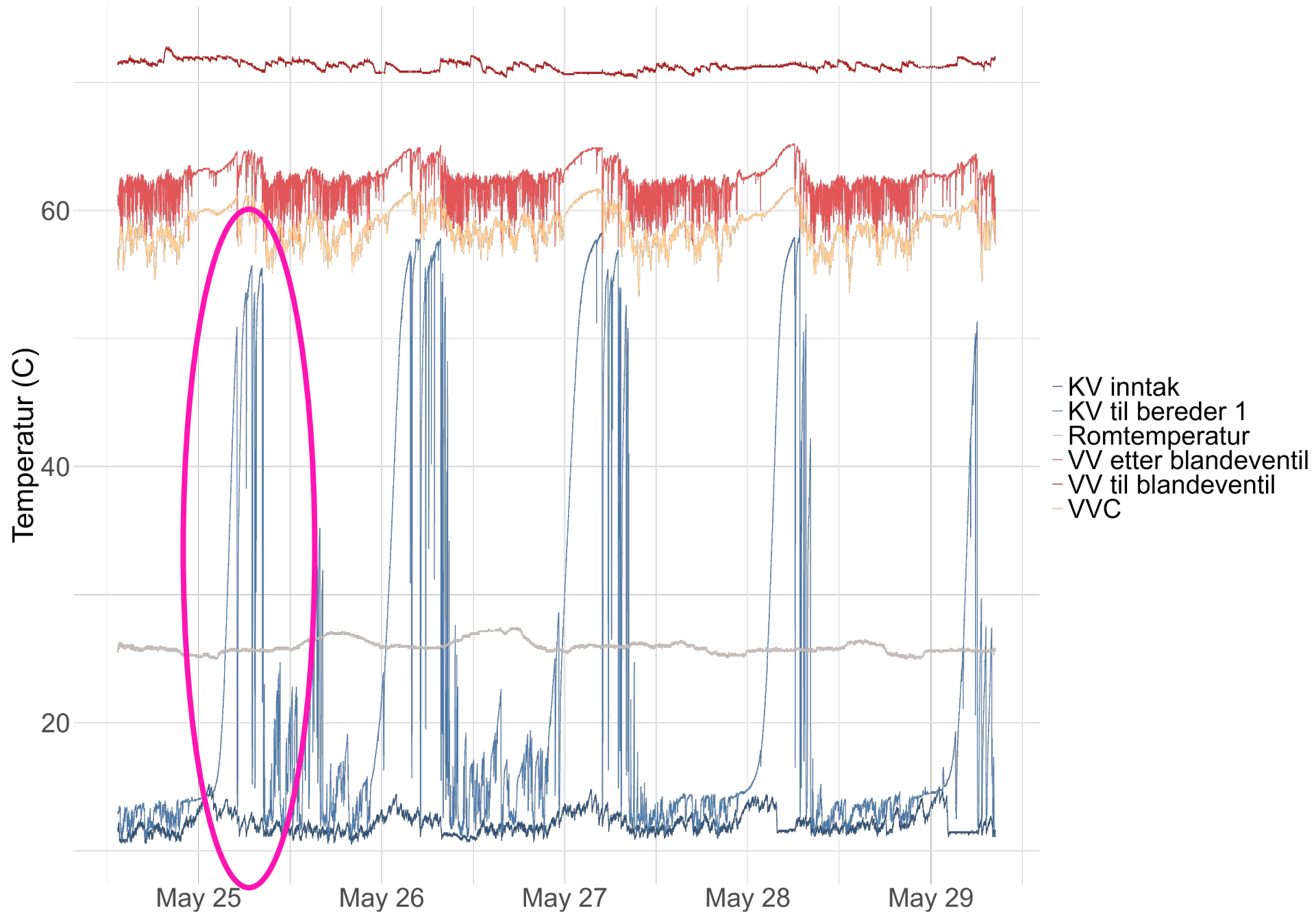
60 – 70 °C

5 – 15 °C



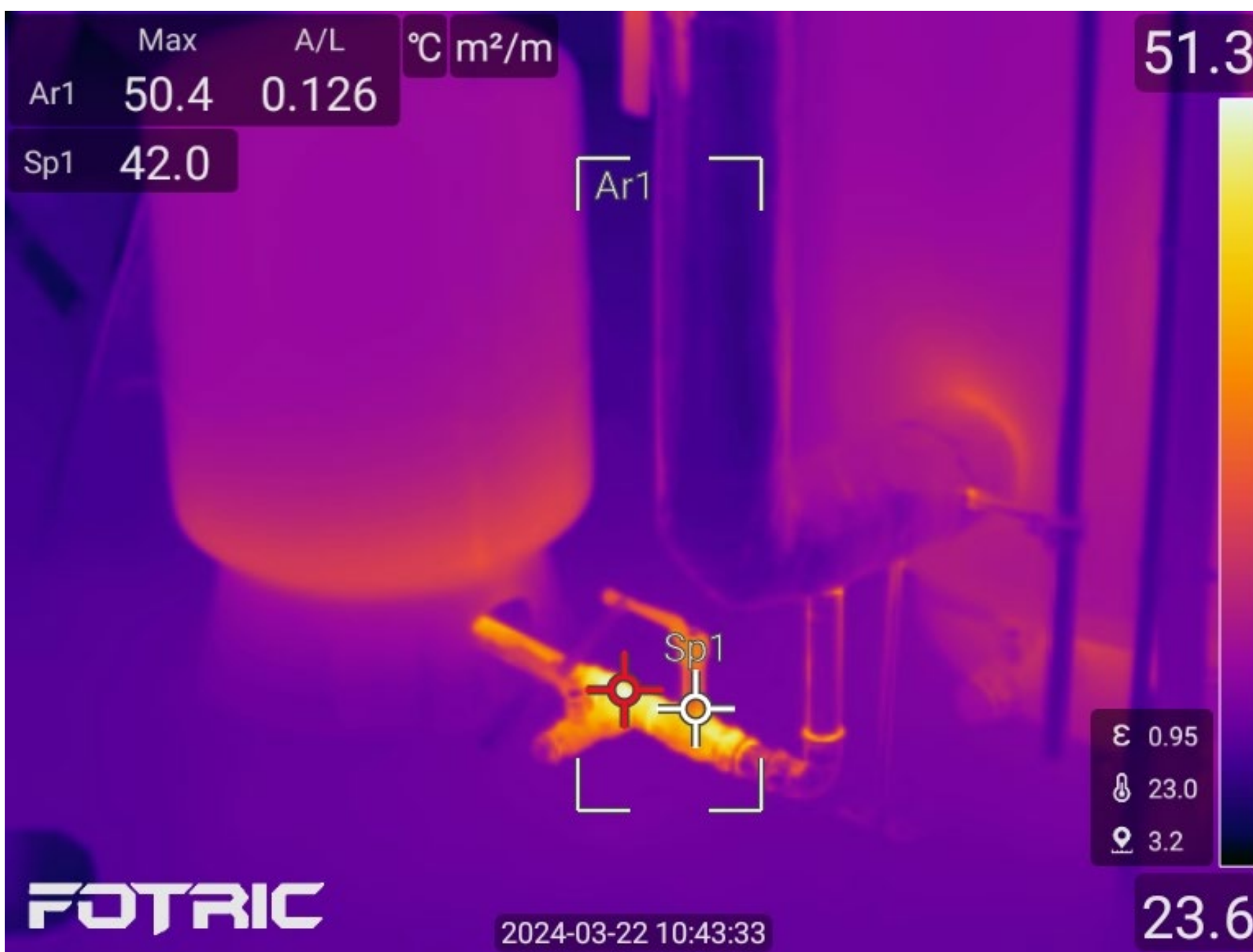


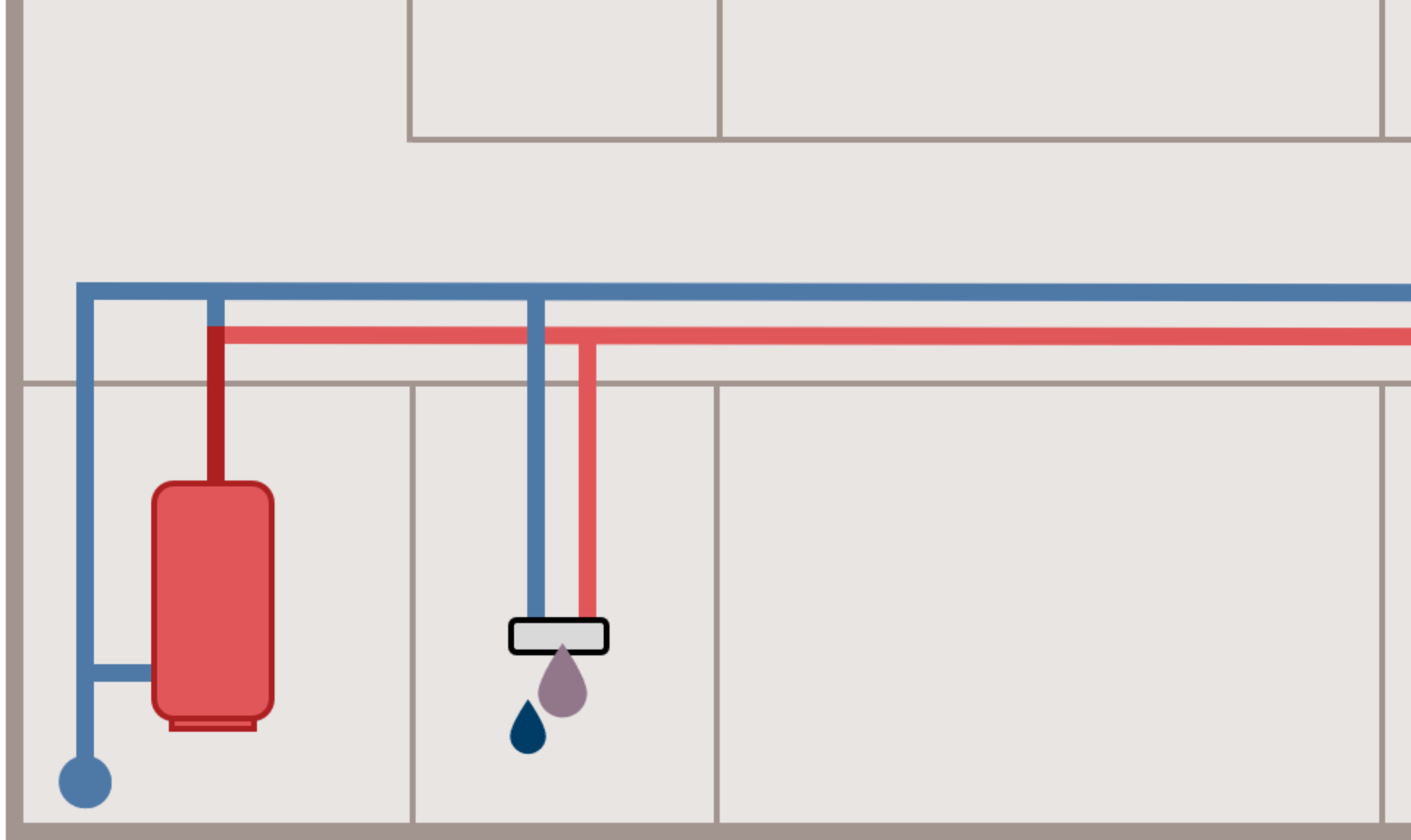
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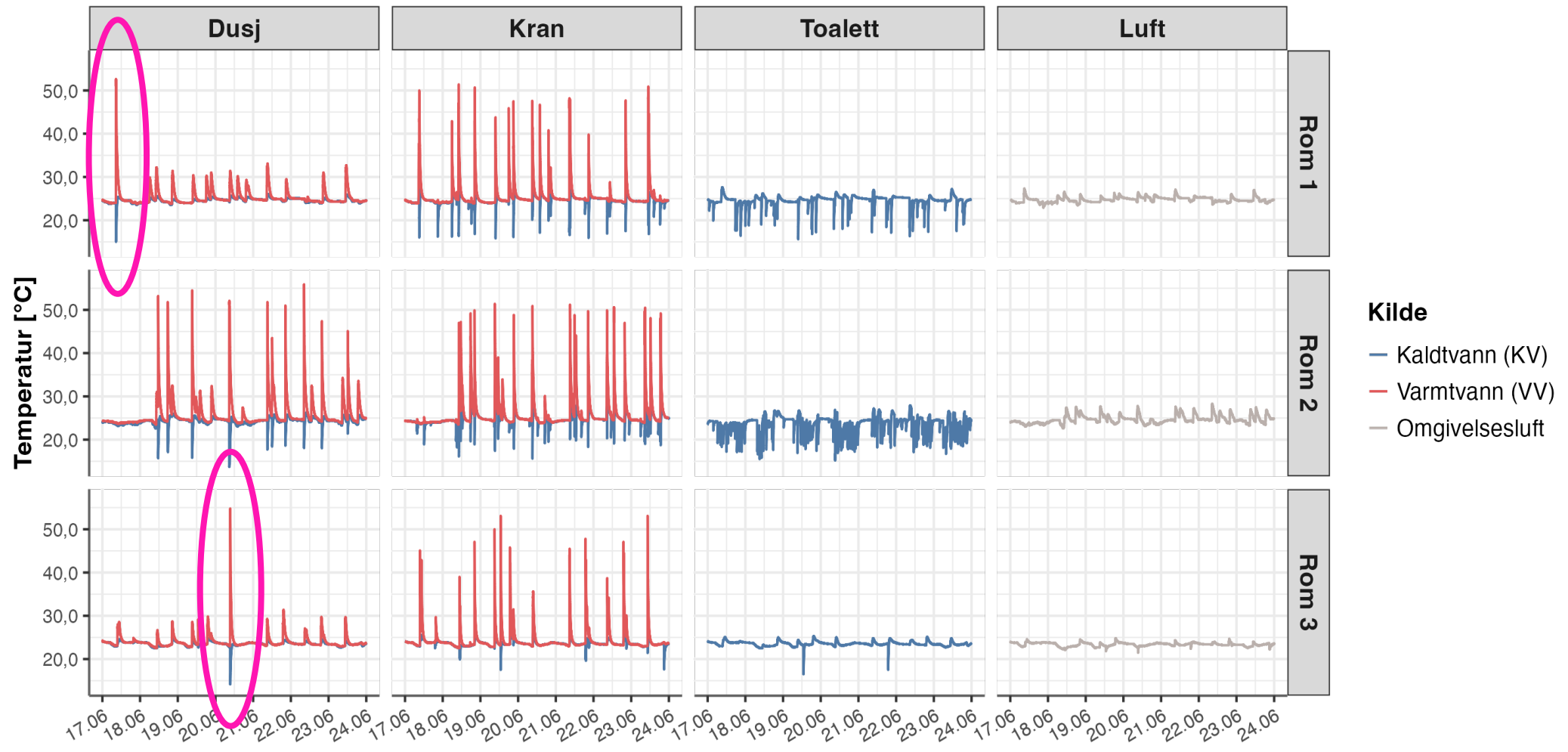
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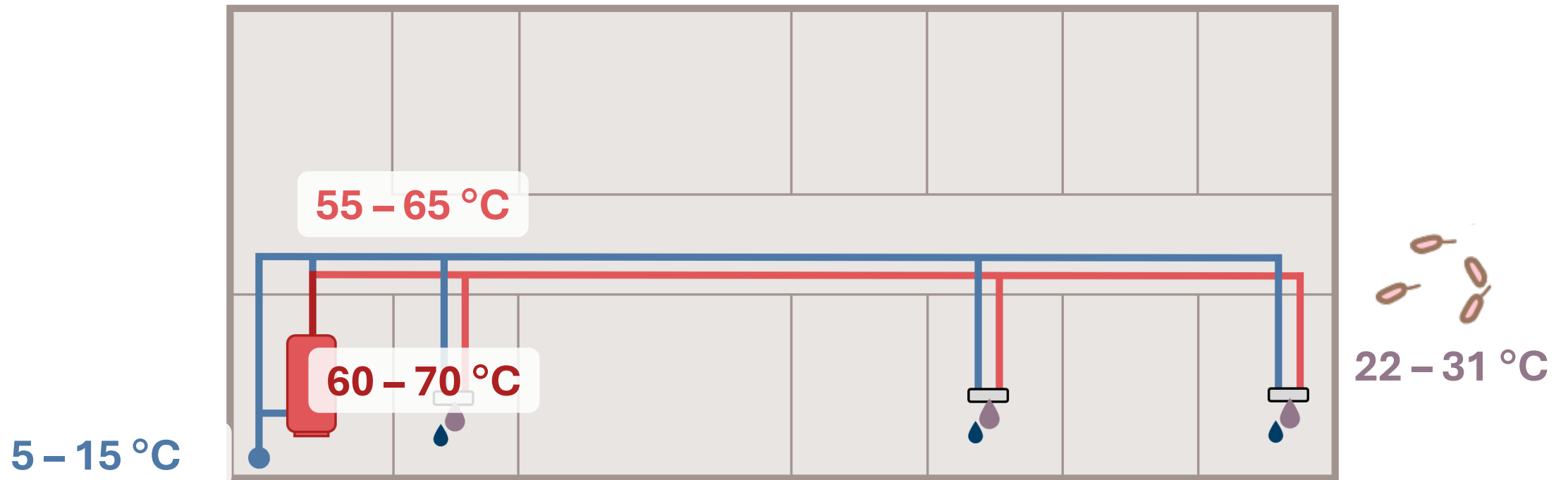


22 – 31°C





Oppsummering



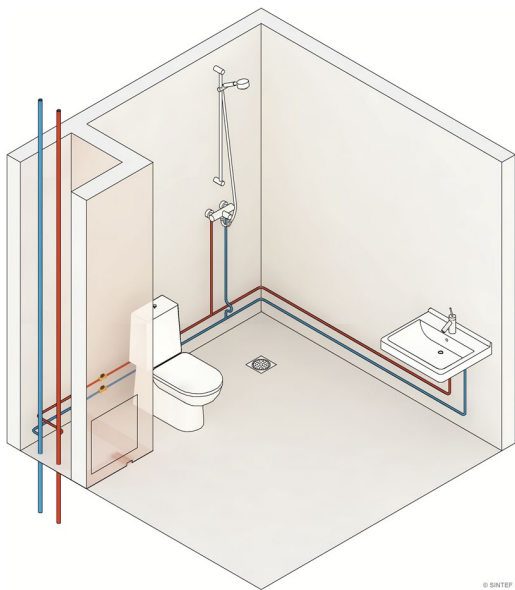


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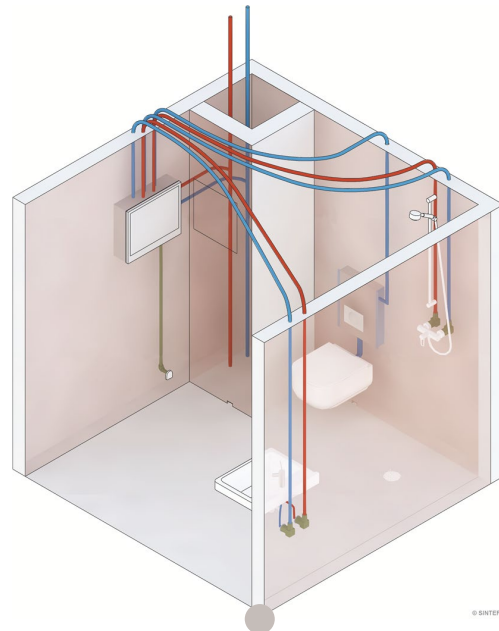
*Hvordan designe vanninstallasjoner
for å forebygge bakterievekst?*



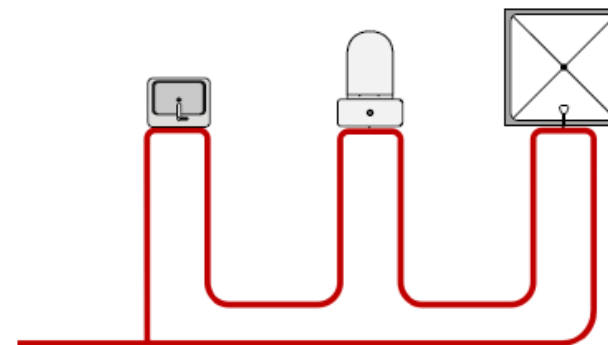
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Før



1990



Fremtid?



Mer informasjon

- Om prosjektet: <https://www.sintef.no/prosjekter/2021/sessile/>
- Spørsmål: karolina.straby@sintef.no



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Teknologi for et bedre samfunn