### streamSAVE+

# How data centres are addressed in streamSAVE+

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## IT Efficiency Improvements in Data Centres



#### ✤ Key Focus:

- Evaluates energy savings from improving IT equipment efficiency.
- Targets servers, storage devices, and networking equipment.
- Technology measures like:
  - Server virtualisation and consolidation.
  - Energy-efficient hardware deployment.
  - Workload scheduling and power-saving modes.
  - Storage tiering and deduplication.
  - Efficient network topologies.

#### ✤ Factors Considered:

- Data centre size and IT power capacity.
- Energy consumption of ICT equipment.
- ICT energy distribution across servers, storage, and networking.
- Energy savings by type of efficiency measure.



### **Cooling Efficiency Improvements in Data Centres**



#### ✤ Key Focus:

- Measures energy savings from upgrading cooling infrastructure.
- Based on improvements in Power Usage Effectiveness (PUE).
- Existing and upgraded cooling technologies:
  - Variable-speed CRAC/CRAH units.
  - Free cooling (air/water economizers).
  - Chilled water systems.
  - Liquid cooling (direct-to-chip, immersion).
  - Thermal energy storage systems.

#### ✤ Factors Considered:

- Data centre size and IT power capacity.
- Energy consumption of ICT equipment.
- PUE variation.
- Share of cooling within the non-ICT loads.



### **Project partners**







### Thank You

### Get in touch for more information!



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All project reports will be available for download on the streamSAVE+ website www.svn.cz/streamsaveplus

And the platform **Streamsave.flexx.camp/** 



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