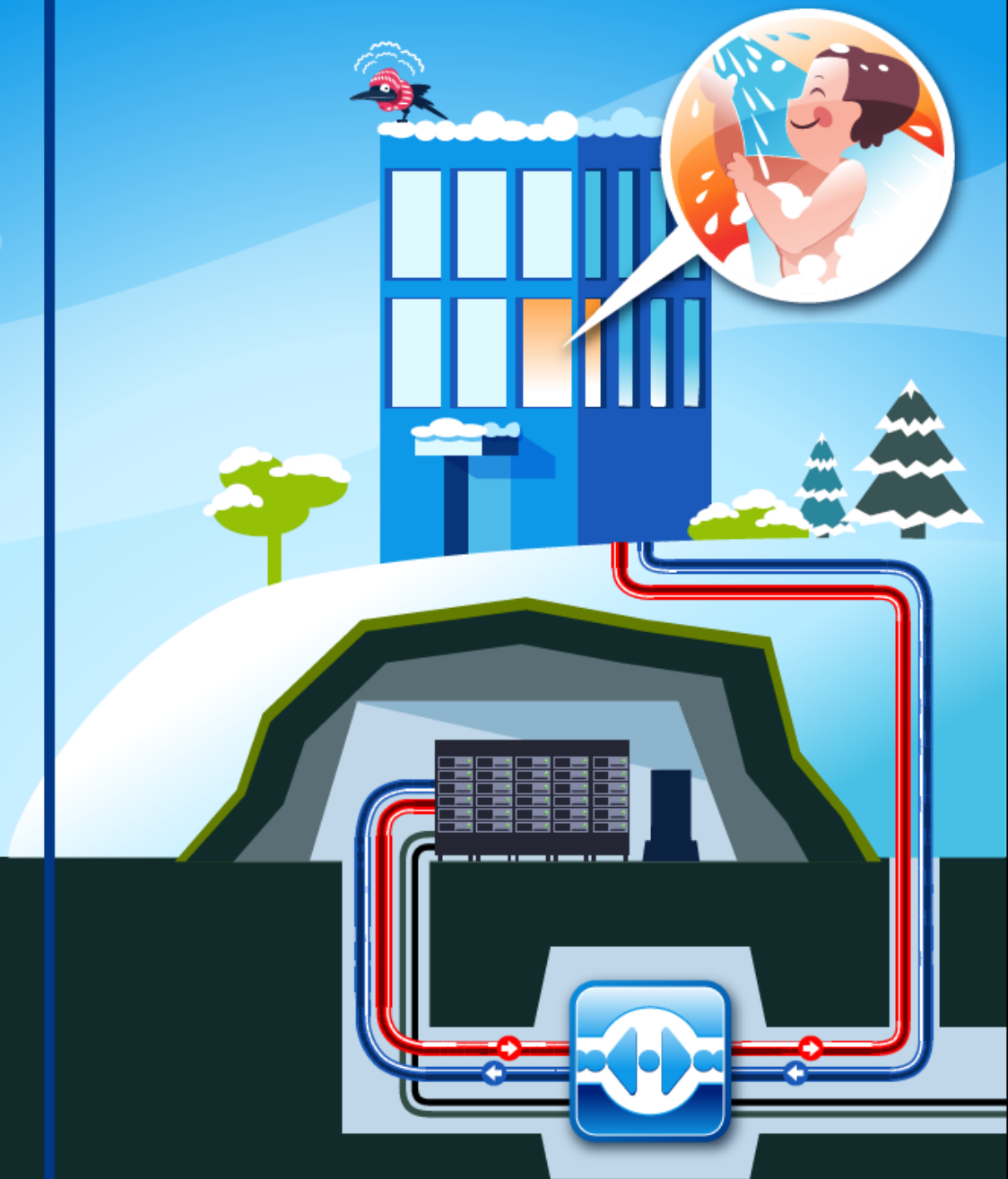
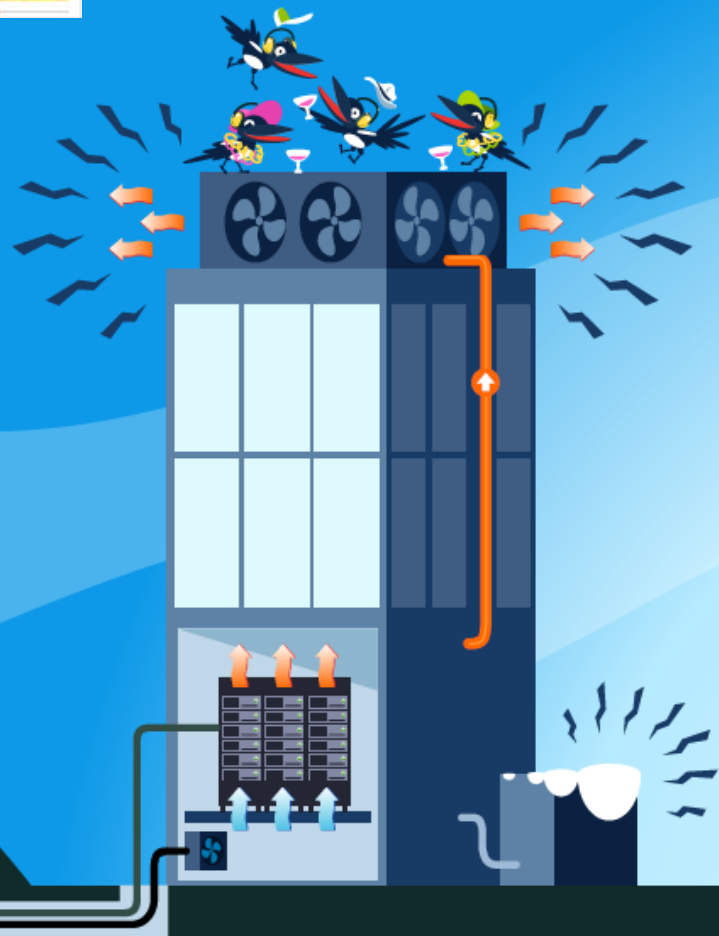
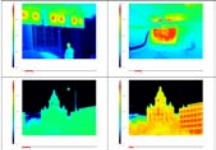




The world's most eco-efficient computer hall from Helsingin Energia

Juha Sipilä
Helsingin Energia



Advantages of cooperation: everything under one roof

- Reliable power supply.
- Expert partnership for power procurement.
 - Electric energy also produced with renewables or CO₂-free, according to client's choice.
- Cooling solution that eliminates own production worries.
- Premises adjoining energy tunnels.
- Data communication connections via existing tunnels.
 - 60km network with 120 entrances or upright shafts.
- Connections of up to several dozen megawatts possible.

Customer benefits

- Reliable partner, committed to long-term operation.
- Opportunity for economical and environmentally friendly cooling solution.
 - 2 MW-client saves €150,000 per annum in electricity bills.
- Maintenance-free cooling solution, easy connection.
- High security of supply of both electricity and cooling.
- Cooling output is steplessly adjustable any time
- Highest possible physical security.

Why is Helsingin Energia entering a new business sector?

Server centres

- Account for 0.1-1.5% of all electric energy consumption in the world
- Consumption expected to quadruple by 2020

International market, establishment affected by:

- Energy price and ability to anticipate costs over lifecycle
- Green values
- Secure and stable climate and political situation
- Sophisticated industrial infrastructure

Future outlook

- Server centres are here to stay
- Environmentally friendly aspect increasingly important in computer hall solutions
- Demand will grow
- Premises may be constructed for key clients, if necessary.
- Ability to provide premises is key condition of attracting large server room clients.

**Client can concentrate on running
its own IT business, Helsingin Energia
takes care of everything else!**

Thank you!

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