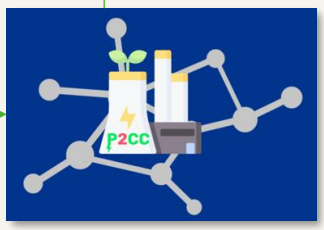
Inuatek Energy Balancing

Power up profits by offering your electrical equipment for energy balancing

The Challenge

The electrical grid in Europe is heavily overloaded and combined with the increase of unstable renewable energy sources, such as wind and sun the problem with electrification of everything around us escalates. Therefore, the transmission system operator (TSO) in Denmark, Energinet, offers attractive compensation to companies that can help balancing the electricity consumption, by either refraining from using electricity (turning off/down equipment) when there is shortage, and consume energy (turn on/up equipment) when there is too much electricity in the grid.

The big challenge is that obligations and requirements defined by the TSO for entering energy balancing typically are too complex, demanding and restrictive for most companies to cope with directly themselves.



The Solution:

The Virtual Powerplant

Inuatek offers a solution that makes it possible to enter energy balancing with a minimum of effort and with immediate payback. This is made possible by a cloud based Virtual Powerplant which combines the energy balancing capacities of individual companies, manages when each contributor needs to be activated for energy balancing and handles matters with the national TSO.

The Virtual Powerplant thus lowers the capacity requirements and greatly simplifies the operational complexities for participating in energy balancing.

Explore the opportunities with Inuatek's Energy Balancing Solution today and start making additional profit from your electricity consuming equipment hassle free.

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The 10 benefits of the Virtual Powerplant

1. The solution is approved, proven and is in operation today at multiple sites.
2. You decide if and when you make equipment available to be triggered to turn on/off, so this will have a minimal impact on your production and work environment.
3. You decide if your contribution is symmetrical, asymmetrical or varies over time.
4. The Inuatek solution doesn't affect and can co-exist with agreements you may have with your current electricity provider.
5. You have no liability and do not risk penalties from the TSO.
6. Your energy balancing contribution can be made fully automated and controlled via your SCADA system.
7. The solution is cybersecure and NIS2 compliant.
8. No part of the solution has direct access to your equipment.
9. You are typically only requested to regulate your electricity consumption approximately 2% of the time you report being available for regulation.
10. You will often only be asked to regulate your electricity consumption for less than 3 minutes.

Which equipment can contribute to energy balancing?

Virtually anything can be connected, but as a rule of thumb minimum 50kW (DK2) / 150kW (DK1) nominal power rating is needed for a good business case.

Below is a non-exhaustive list of equipment which is well-suited for energy balancing:

- Mechanical aerators
- Agitator
- Electric piston pump
- Refrigeration compressor
- Dehumidifier
- Ventilation
- Charging stations/depots
- Lighting system
- Electric cartridge / Electric boiler
- Solar cells
- Battery system
- Heat pumps
- Generators

For more information:

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About Inuatek
Inuatek supplies consulting services as well as end-to-end turnkey solutions for industrial data acquisition and processing for both manufacturers and machine builders. Inuatek has activities primarily in Denmark and via international distributors, and with an office in Copenhagen.

About P2CC
P2CC operates in a rapidly growing market and the solution, which is internationally scalable, has a high level of innovation. The solution implements sector coupling using balancing services that integrate electricity, heating, cooling and water to stabilize the grid and displace CO2 emissions

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