

Ecowise Healthy Schools Suite



Meet “Ecowise Healthy Schools Suite”

Ecowise Healthy Schools Suite helps in achieving energy efficiency goals by providing the information to facilitate desirable indoor studying/teaching conditions.

EHSS helps to improve Indoor air quality, which is directly linked to respiratory health and the spread of transmittable diseases like COVID-19.

- Healthier Educational Environment – A study conducted by EPA (USA) shows that students in adequately ventilated classrooms perform 17% better.
- Energy Efficiency – EHSS helps to reduce operational costs in educational facilities.



Healthier Educational Environments

Indoor air quality and thermal comfort have a significant impact on students and their ability to learn. Low quality indoor air is a result of high levels of carbon dioxide concentration and humidity, which has a detrimental impact on students' health and consequently on their academic performance.

Through live feedbacks, recommendations, and automatic interventions, the Ecowise Healthy Schools Suite assists in improving the air quality and thermal comfort within learning environment while helping to minimizing excessive energy losses.

Energy Efficiency

Administration and staff face a constant dilemma to create a comfortable learning environment while trying to conserve energy. However it is difficult to meet the varying heating demands with available controls

Educational Institutes are under constant pressure to balance operational costs and maintaining comfortable environment within their building.

The Challenges our institutes are facing:



Indoor Air Quality

- Staff are not aware of consequences caused by low quality air and consequently will not know when to take appropriate actions.
- Disproportionate ventilations practices lead to excessive energy losses and significantly higher operational cost.
- Currently they do not have appropriate tools or information to make the right decision at the right time.

Heating System Efficiency

- Facility managers do not have access to information which will help them to determine why their premises are energy inefficient.
- Consequently they don't have control over their bills with ever increasing operational cost.
- Rarely services are combined with access to "Live", information to make dynamic decision.
- Current equipment is insufficient to provide information relating to indoor temperature or quality, which usually leads to either under or over heating the premises, contributing to an uncomfortable environment for educational needs. temperature readings in thermostatic valves resulting in occupant discomfort and system inefficiency.



- + EHSS helps school / colleges / universities to facilitate a healthy educational environment and create an environment of productive learning.
- + EHSS will continuously provide information to your staff relating to indoor air quality. **And if the quality of the air is low it will suggest appropriate actions.**
- + During the winter months, EHSS will provide important information to reduce ventilation while helping to reduce the cost usually lost to inefficient energy management.
- + EHSS provides active information directly to staff and students about indoor air quality and then uses that information to provide practical solutions based on data acquired through sensors.
- + EHSS allows parents to keep track of the air quality in their children's classrooms.
- + EHSS helps to avoid unexpected utility bills by anticipating monthly consumptions and suggesting solutions to conserve energy.
- + With integrated operation of indoor air quality sensors and smart valves, EHSS prevents thermostatic radiator valves from malfunctioning.
- + EHSS keeps you notified by sending alerts like "open-window" – this helps in managing conserving and managing your energy usage.

How does Ecowise
Healthy Schools Suite
help student, staff,
and parents?

How does Ecowise Healthy Schools Suite help technical staff and administration?

- ⊕ Real-time data monitoring and automated reporting defined by users' needs.
- ⊕ Determining operational parameters of the heating system by using predictive modelling and data-driven analysis to minimize energy usage.
- ⊕ By integrating operational models, understanding demand and supply of energy EHSS helps to manage environment during peak hours of the day.
- ⊕ In the event of unexpected operation conditions, technical staff, facility managers and administration is informed about the possible reasons and solutions.





Reaching sustainability goals with **ecowise** Healthy Schools

Services:

Monitoring and feedback service

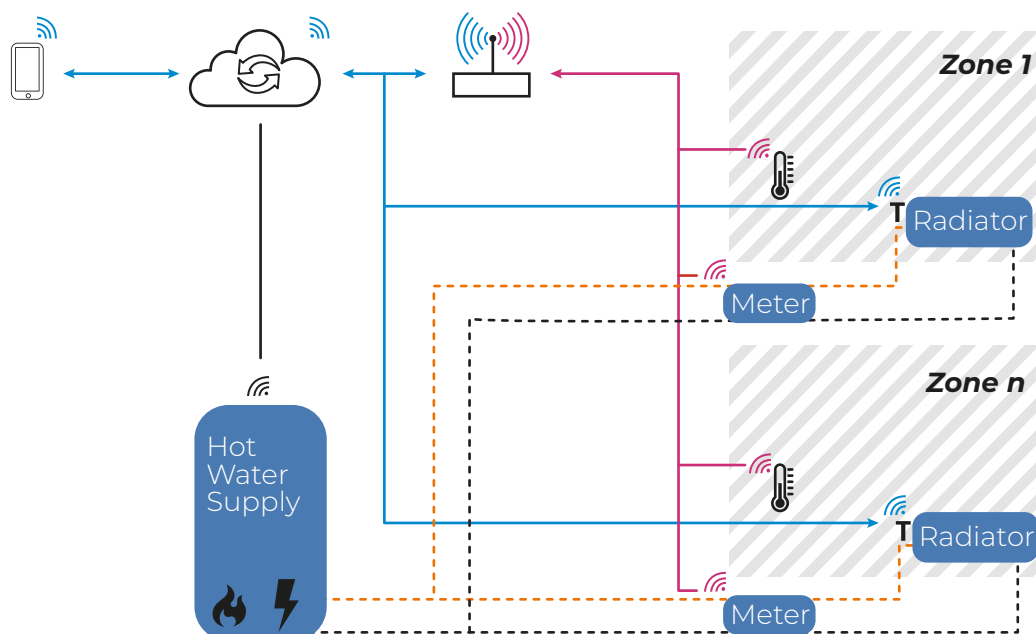
Indoor air quality support

Predictive control of the heating centre

Demand-side smart control

On-Site Equipment Requirements:

- One indoor air quality sensor for each room
- One LoRa gateway for each site
- One smart thermostatic valve for each radiator
- One heat meter with LoRa connection for the heat centre



 LoRa connection

 Hot water supply pipe

 Internet link

 Wifi/Internet connection

 Hot water return pipe

 LoRa link

 IAQ Sensor

 Control system connection

 LoRa gateway

 Smart TRV



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