



SmartSolutions Monitoring

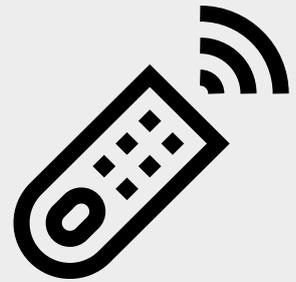




The problem

No control

In Germany, there are approx. 3.3 million apartment buildings with approx. 22 million housing units. 40% of all properties in Germany have heating systems that are more than 20 years old. These outdated heating systems are not only inefficient, but usually cannot be monitored and controlled remotely.



The solution

FEMO® boxes

With the FEMO® box (remote monitoring and supervision box), Luana has created a manufacturer-independent monitoring and control system that is used for asset management in existing real estate and in new construction. The system monitors the technical building equipment of apartment buildings, nursing homes, or commercial properties in real time with the help of artificial intelligence.

SmartBuildings

The market

According to the digital association Bitkom, up to 14.7 million tons of CO₂ emissions can be saved. This corresponds to around 30% of the climate protection law's reduction target of 51 million tons of CO₂ in the building sector. The largest share is accounted for by smart, automated control of heating, ventilation ventilation, and hot water generation systems. ■

14.7 m

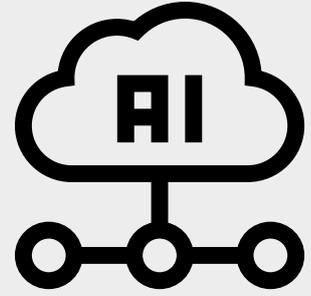
14.7 million tons of CO₂ emissions can be saved through smart technology. By way of comparison, to offset one ton of CO₂, we would have to plant 80 beech trees, for example.



The problem

Different worlds

Most buildings in Germany have manufacturer-dependent control systems, if they have intelligent plant control at all. As a result, islands of data are created within real estate portfolios. This makes plant optimization more difficult and thus the possibilities to supply properties more efficiently. In most cases, these systems do not have interfaces to ESG reporting systems.



The solution

AI-driven monitoring

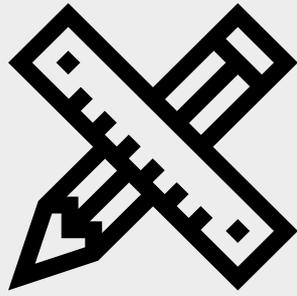
With the FEMO® (remote control & monitoring box), Luana has created a manufacturer-independent, open system that supports all protocols such as M-bus, ModBus, BACnet, or LON. No matter whether state-of-the-art or existing heating or ventilation systems, PV systems, storage units or wallboxes—FEMO® joins all these systems together, monitors, controls, and optimizes them and also delivers data to any interface.



FEMO®

The technology

With the FEMO® box (remote control & monitoring box) for optimized control developed by us, we can precisely monitor the plant operation of the energy centers every minute via a uniform control and monitoring concept. The operating data are regularly analyzed by our energy management team. With sensors installed in the energy center, measurement data is recorded and evaluated by an intelligent system. This means that problems can often be detected and rectified before they are noticed on site. ■



The offer

Customized

With SmartSolutions, Luana develops optimal and tailor-made concepts under considering energy consumption profiles, space availability, and the best mix of new technologies. Luana also offers attractive financing options for the realization of these projects and takes over full operational management.



Your benefits

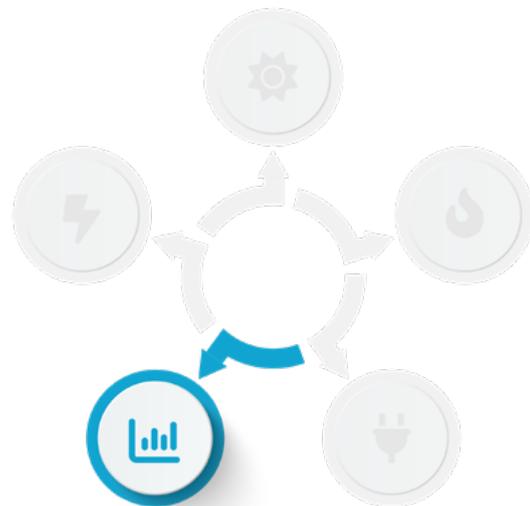
All from one source

Luana develops, plans, builds, and operates your photovoltaic system. If desired, this can also be financed. Our customers receive predictable electricity costs, increase their security of supply, make an important contribution to climate protection, and finally improve their ESG rating.

Monitoring SmartSolutions

Luana's goal is to ensure that every kilowatt hour produced is generated in an environmentally-friendly, cost-effective, and decentralized manner. To achieve this, we offer SmartSolutions that optimally combine modern technologies, such as photovoltaics, heat pumps, charging infrastructure, and combined heat and power plants, to accelerate your personal energy transition. This approach takes a holistic view of reducing CO₂ emissions. We utilize innovative optimization techniques, financing alternatives, and an AI-powered remote monitoring system to create customized solutions for our clients. ■

Monitoring is only one component of our holistic energy concepts. You don't know exactly which technology components you need? No problem. We will be happy to advise you.





Our approach

Integrative
collaboration

In accordance with our corporate value “community”, we place the highest value on an extraordinarily human approach to our customers. Integrative cooperation characterized by openness, fun, and trust is our approach.

Best practices References

With us, projects become your success story. We are pleased about our long-term and successful cooperation with our satisfied customers—since more than 15 years.



“Whether existing properties, new projects, or ESG—in terms of energy with Luana we finally have a partner for everything. Highly professional!”

Nils Harde
INP group



“Luana develops a sustainable energy concept individually for each of our projects. The energy pioneer.”

Stefan Mueller
ENCC



“Security of supply is the most important thing for us and our residents. Luana is the best energy supplier for us. The insider’s tip for operators of care properties.”

Kai Becker
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Let's get in touch

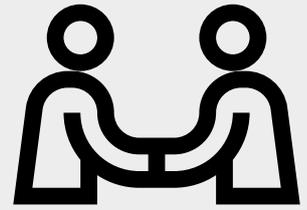
Looking forward!

Any questions? Let's talk to each other.
You are always more than welcome to visit us
in Hamburg at our headquarters on the Alster.
Of course, we are also happy to come to your
office.

We look forward to meeting you and providing
you with a free, no-obligation, custom quote.



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Personal & direct
Your contact person



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