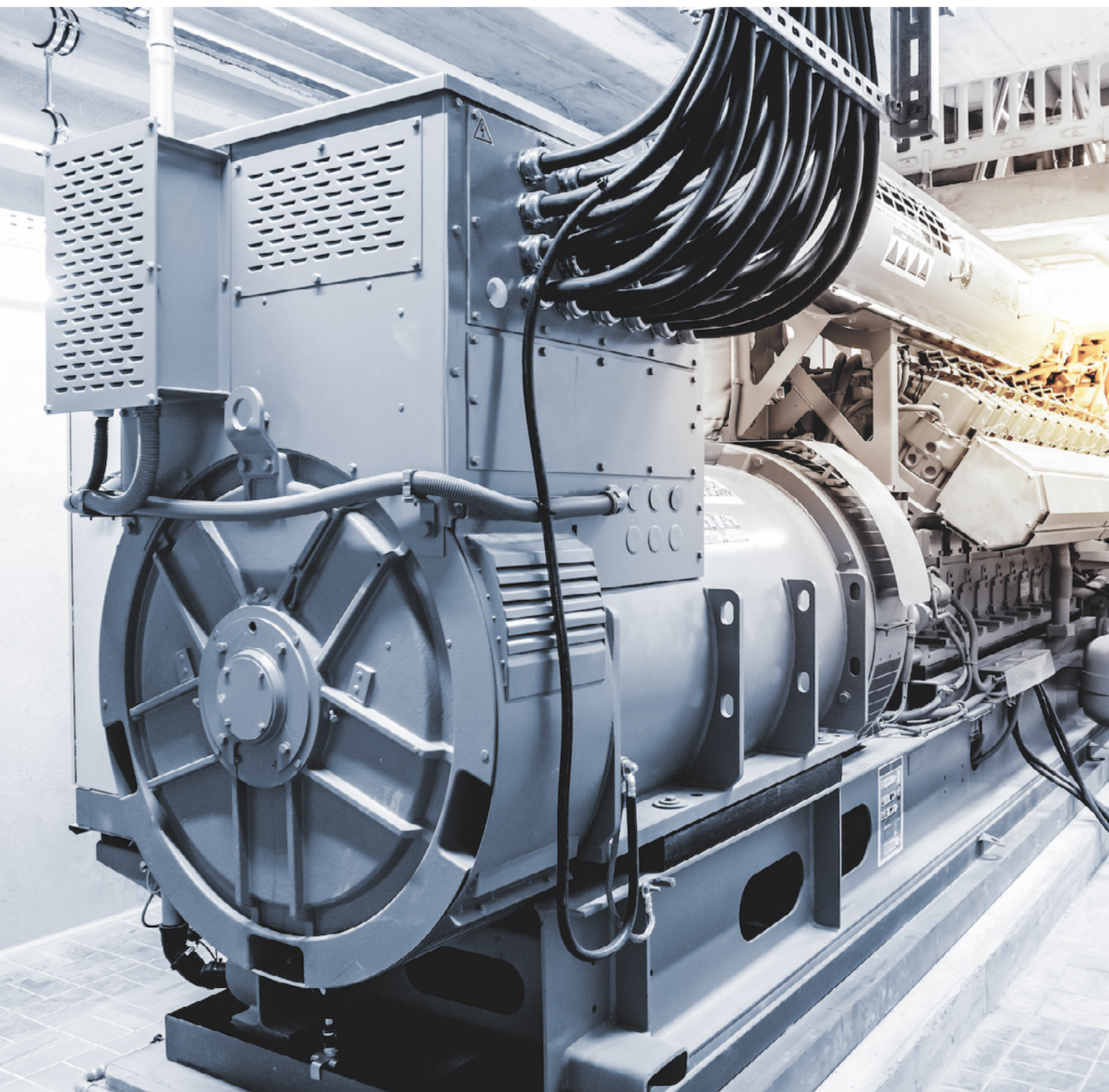
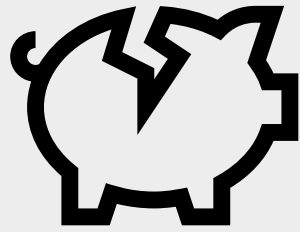




SmartSolutions

CHP technologies





The problem

The costs

The heat transition is in full progress. Legislators and subsidy programmes are placing a strong emphasis on sustainable technologies for new and existing buildings, which must be transformed into sustainable properties. However, the end of the use of fossil fuels must be economically viable. Here, ecology and economy must be brought into harmony, especially in larger properties, whose requirements must be specifically incorporated into supply concepts.



The solution

Economic concepts

Luana plans and operates CHP projects: CHP plants offer combined heat and power production, which leads to greater overall efficiency and cost savings.

We provide our CHP solutions with biomethane as an energy source. Biomethane can be produced locally, reducing dependence on imported fossil fuels, which means stable energy prices and improved security of supply in the long term. Furthermore, our CHP solutions are „H₂-ready“.

CHP

The market

According to the latest projections, the total market for heat generators increased slightly from 929,000 to approx. 949,000 heaters in 2022.

At the same time, declining sales figures for gas heaters (approx. -10%) are recorded for 2022.

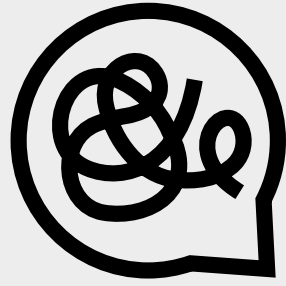
As a result, the market share of heat pumps in the heat generator market jumped from 16.5% to approx. 25%, which means that every fourth heating system replacement in 2022 was associated with the installation of a heat pump.¹ ■

Source:

¹ Bundesverband Waermepumpe e.V. (bwp): „Marktentwicklung-Prognose-Handlungsempfehlungen“, Sector study 2023

70%

Approx. 70% of the heating market is still fossil.

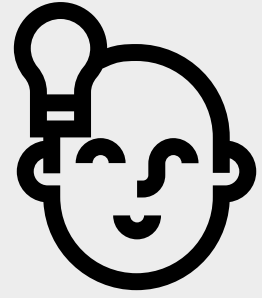


The problem

High complexity

CHP units are technically sophisticated systems and their planning, installation and operation are full of pitfalls and require specialist knowledge and expertise.

In addition, the regulatory requirements in Germany are also considerable. Whether energy tax refunds, CHP surcharges, Bafa notifications, or the market master data register: the complexity extends not only to the technical details, but also to the commercial and administrative tasks.

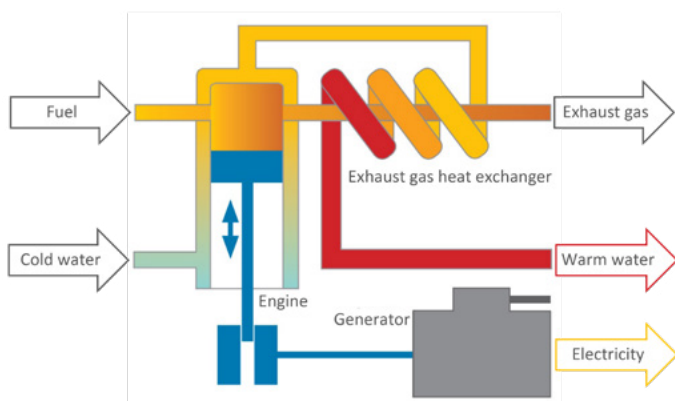


The solution

Know-how

Luana has been developing and operating energy projects since 2008. With over 100 projects on its own balance sheet and more than 150 realised projects, their profitability is always based on the fact that the concepts are tailored to the property.

Experience and expertise are the key drivers of success here in order to utilise the technological possibilities in an optimal supply solution.

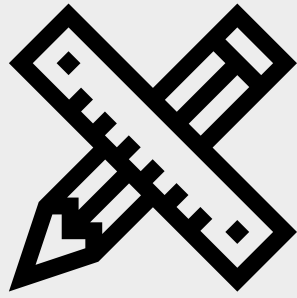


Picture above: A schematic representation of how a combined heat and power plant works.

CHP

The technology

CHP units are modular systems with a stationary combustion engine and a connected generator that produce electricity and heat at the same time. The simultaneous production of electricity and heat improves the energy efficiency immensely. ■



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, and operates your heat pump. 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.

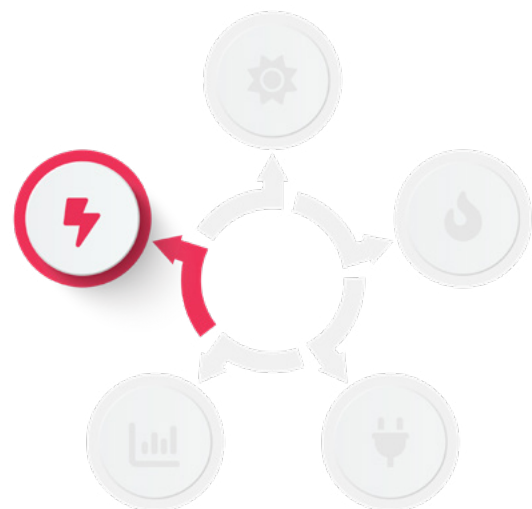
CHP

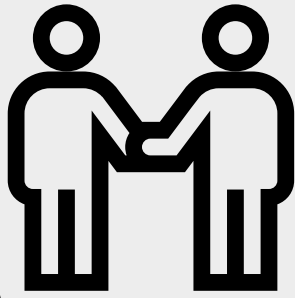
SmartSolutions

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. ■

CHP technologies are 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 Müller
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
diaconia Ducherow

WEL- COME

Let's get in touch

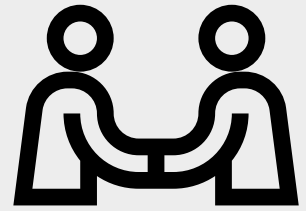
Looking forward!

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.



Status: August 2025



Personal & direct

Your contact person



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