

## 2023: A year of start-ups and innovation

Digitalisation and decarbonisation have long been familiar concepts for LEG. However, we really got the ball rolling in the 2023 financial year with our smart innovations for the green and digital transformation of the housing industry. We see our actions as an opportunity to make progress on our own path to climate neutrality while also developing new business models and partnerships beyond portfolio management that offer genuine value.

### Q1/23

#### Efficient climate protection: One challenge – three solutions

After making an excellent start in 2022 with RENOWATE, our joint venture for serial refurbishments, the first quarter saw us expand our repertoire of climate protection solutions for a wide range of applications. This includes the optimised use of existing heating systems thanks to smart control solutions and energy efficiency incentives for tenants, the low-cost replacement of heating systems with minimum disruption to tenants, and continued efforts to scale our activities in the area of comprehensive serial refurbishment. We presented an overview of our measures to the public for the first time in March 2023.

#### termios exhibits AI-controlled thermostat solution at trade fair

The business developer mantro GmbH, the Sauerland-based family company Oventrop GmbH & Co. KG and LEG are three partners who share a commitment to optimising the digital control of hydronic heating systems. Their first joint solution – the smart, AI-controlled thermostat termios Pro – automatically regulates the hydraulic balance of the heating system while continually optimising the system. At the ISH in Frankfurt in March, the world's leading trade fair for water, heating and air conditioning, the thermostat attracts a great deal of attention. It enables energy savings of up to 30% at a cost of just a few hundred euros per apartment. [www.termios.de](http://www.termios.de)

#### Heat pump campaign with Mitsubishi Electric

In March 2023, LEG enters into a strategic partnership with the Ratingen-based company Mitsubishi Electric on the use of innovative air-to-air heat pumps with the aim of actively promoting the energy and heat transition in the housing industry in cases where it is necessary to completely replace existing heating systems. After an initial phase, the goal is to install several thousand heat pumps a year in LEG's existing buildings from 2027 onwards. In contrast to the more familiar air-to-water heat pumps, air-to-air heat pumps have the advantage that they can also be installed in buildings that are not yet insulated. They are particularly efficient because they allow self-contained gas heating systems to be replaced without time-consuming pipework renovation. The cost to the building owner is halved, while the rent including heating for tenants is unaffected assuming their heating patterns remain

unchanged. At a press event in Duisburg, North Rhine-Westphalia State Construction Minister Ina Scharrenbach is introduced to the solution and talks to tenants on the pilot scheme, who have only positive things to say about the heating performance and the ease of installation.



### Q2/23

#### RENOWATE celebrates first anniversary and continues refurbishment work

Our joint venture with Rhomberg Bau for the serial refurbishment of buildings celebrates its first anniversary. Having successfully completed the first two pilot projects at Zeppelinstrasse in Moenchengladbach-Lürrip in late 2022, achieving primary energy savings of around 95% at 47 apartments in eight buildings, RENOWATE begins work on the Vossenbäumchen/Frankenfeld neighbourhood project in early April. In the first phase of construction, 21 of more than 120 apartments across the entire neighbourhood will be upgraded in terms of energy efficiency in just a short space of time. [www.renowate.earth](http://www.renowate.earth)

#### Future iQ – applied research with the Fraunhofer institutes

LEG initiates the Future iQ research cluster for integral neighbourhood solutions together with the Fraunhofer institutes UMSICHT and FIT. The project centres around testing and implementing innovative energy supply concepts in two different LEG neighbourhoods. The aim is for the solutions to be realised quickly so that they can be rolled out across the entire housing industry. The project is supported by the German Federal Ministry for Economic Affairs and Climate Action.

#### A victory for climate protection: Serial refurbishment wins numerous awards

RENOWATE wins no fewer than three awards in July: the renowned DW Future Prize of the Property Industry, a Gold Award, and a special mention at one of the most important German award ceremonies for brands, the German Brand Award (GBA).

## Youtilly revolutionises the market

Our subsidiary Youtilly is the first Germany-wide tender platform for property maintenance. It focuses on services in the property sector and provides a digital solution for awarding and managing contracts. In June, we introduced another additional function that gives our tenants an overview of the services performed at their building. At the same time, they can actively rate the property maintenance in order to facilitate improvements. The commissioned service providers also benefit from direct feedback on their services.

[www.youtilly.de](http://www.youtilly.de)



## Q3/23

### Federal Minister visits the LEG living lab

In July, the German Federal Minister for Economic Affairs and Climate Action, Dr Robert Habeck, visits Moenchengladbach-Hardt. Working with partners from the construction industry and in cooperation with the German Energy Agency (dena), this is where LEG has set up a real-life laboratory to test and continually optimise the process of comprehensive serial refurbishment. Habeck is accompanied by North Rhine-Westphalia State Minister for Economics Mona Neubaur and Mayor Felix Heinrichs.



### dekarbo – joint venture with Soeffing Kälte Klima GmbH

In September, the joint venture dekarbo is founded by LEG and the Dusseldorf-based company Soeffing Kälte Klima GmbH. dekarbo combines housing industry know-how and trade expertise in air conditioning and heating technology. It fits air-to-air heat pumps in LEG apartments and provides support throughout their entire life cycle. It also supplies this solution to the market. Installation takes just a few days per home. [www.dekarbo.earth](http://www.dekarbo.earth)

## Q4/23

### Sustainable success: SBTi validates LEG's near-term climate targets

In November, the independent Science Based Target Initiative (SBTi) gives us the good news that it has confirmed our near-term emission reduction targets as science-based and in line with the 1.5 degrees Celsius target set out in the Paris Agreement.

### On the ZIA Innovation Radar leaderboard

In October, no fewer than four of our innovations feature in the ZIA Innovation Radar, the leading source of innovations from throughout the entire German property sector. The leaderboard for 2023 includes our air-to-air heat pump initiative, RENOWATE and termios in the "CO<sub>2</sub> reduction in existing properties" category and Youtilly in the "Digitalisation" category. [www.zia-innovationsradar.de](http://www.zia-innovationsradar.de)

### Smart thermostat certified for hydraulic balance

In November, termios Pro is certified by the renowned HLK Stuttgart institute, making it officially suited for hydraulic balance. The installation of the AI-controlled smart thermostat allows building owners to achieve relevant energy savings.

### DGNB gold certification for F99

Our headquarter in Dusseldorf's Airport City, also called F99, receives the DGNB gold certificate in December. DGNB building certification is viewed as a seal of quality for sustainable construction in Germany. [www.dgnb.de/de/zertifizierung](http://www.dgnb.de/de/zertifizierung)



You can find out more about our partnerships, projects and products on our Innovation landing page at

<https://www.leg-wohnen.de/en/corporation/leg-group/innovationen>.