

**Grundfos Hospitality** 

# Checking in on a smarter, more sustainable hospitality industry

Between growing guest demands and the increasingly urgent need to accelerate the green transition, the hospitality industry is striving towards the perfect balance of energy efficiency and performance. At Grundfos, we offer intelligent solutions and services that help optimise businesses while supporting a better future for us all.



### Introduction

Increasingly, we see a rising need – and demand – for more sustainable practices across every aspect of the hospitality industry. If we look at hotels globally, guest rooms account for 40-80%\* of energy use in the hospitality industry. Break this down even further, and we see that heating and cooling are the main factors, with HVAC and water systems consuming a great deal of energy to keep guests safe and happy when in their rooms.

Unlocking water and energy efficient solutions in hospitality, without compromising comfort and quality. **Let's energise tomorrow.** 

\*Schneider Electric, Balancing Hotel Energy Use and Guest Comfort, 2015

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# Your partner for intelligent, energy-efficient buildings

#### Discover the benefits of intelligent solutions

Many of today's hotels still work with the systems of yesterday. Generally, and in the context of energy efficiency, that means outdated technology and more manual input, all of which leads to more water and energy consumption than is required – and higher CO<sub>2</sub> emissions.

At Grundfos, we're determined to help our customers working in the hotel industry ease into their individual green transitions. That means focusing on making buildings more sustainable and energy efficient by way of more intelligent and connected systems.

Intuitive, adaptable systems that combine high-efficiency pumps, smart controllers, and an easily accessible digital platform with regular energy and audit checks, so you can identify areas for improvement easily and quickly.

#### Save energy with our optimisation services

Whether you're retrofitting your existing setup or planning a new system, our energy optimisation services can help you maximise the energy efficiency of your operations. With an Energy Check, you can identify areas for improvement in your system and get recommendations for upgrades. And with an Energy Audit, you get detailed insights into system performance that can help significantly save energy.

Did you know?

Intelligent pumps can reduce energy consumption by 25%\* compared to standard pump solutions.

\*Realty.com, The Economic Times, 2023

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# Streamline your sustainability journey

#### Bring synergy to your system

Providing great services and solutions is one thing, but to ensure the most value for you and your guests, we must also consider the convenience factor.

Our services and solutions are designed to connect to your BMS/BAS platforms with ease. Giving you the opportunity to store and analyse all your data in one place where you can easily access it and better understand your systems and how to utilise them.

#### Other benefits

- We offer modular and prefabricated systems for greater system flexibility.
- Intelligent solutions offer greater connectivity throughout your system. You get accurate consumption data collection, which can help enhance energy efficiency and reliability.
- Our energy-efficient and highly reliable HVAC and water systems can help you save between 20% and 50%\* in energy use compared to older pump systems.
- Our high-quality pumps are designed to perform better for longer, meaning significant cost savings and less unplanned downtime.

# Improve reliability and guest comfort while lowering energy consumption

#### It's possible - using demand-driven solutions

Reliability is vital to any operation. Especially so when your business is keeping dozens if not hundreds or even thousands of guests satisfied at all times. With that in mind, it is essential your HVAC and pressure boosting systems work as expected. 24/7.

So you can spend less time worrying about the comfort of your guests and more time on other areas of operation.

#### The challenge

When looking at your operations within the context of sustainability, the question is: how can you ensure guests

#### Did you know?

More than 69%\* of travellers worldwide are on the lookout for more sustainable travel options

\*Booking.com, Booking.com predicts the top trends for the future of travel, 2020

always have hot water on tap or a shower that always delivers the right amount of pressure without your hotel consuming an excessive amount of energy?

#### The solution

With our solutions and digital services, you can build a more advanced system that can adjust energy usage according to real-time demand. How?

- You can gather a wealth of data from our equipment, which can be accessed via MODBUS / SCADA protocols and similar solutions.
- With predictive maintenance, you can schedule maintenance according to your needs, proactively addressing issues and ensuring guaranteed reliable performance.
- Using our Grundfos CUE variable speed drives, you can reduce downtime, maintenance costs and OPEX.
- Via intelligent monitoring you can receive alerts whenever a fault is detected in your pump system, so you can solve issues before they escalate.
- By combining our smart pumps with high-efficiency IE5
  motors and intelligent digital solutions, you can use
  temperature-controlled valves to enable variable water flow,
  improve water pressure, and ensure greater consistency
  when it comes to temperature settings.



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<sup>\*</sup>Energy.com, Energy saver: Save money and stay cool with an efficient, well-maintained air conditioner, 2022

### Our product portfolio

From high-efficiency pumps to smart frequency converters, we offer a wide range of solutions for the hospitality industry. Take a look at some of our products below.



#### **Grundfos Hydro MPC**

Use our pressure-booster solutions to ensure consistently great pressure control and optimal energy efficiency. The Hydro MPC range is easy to install and is designed for boosting applications that require constant pressure. These solutions are recommended for complex systems in buildings and water utility installations.



#### **Grundfos CUE**

Our external frequency converters have been designed to improve speed control in a number of our pump solutions.

The CUE range works across a variety of applications and areas, from pressurisation of drinking water to chilled water and hot water systems in HVAC.



#### **Grundfos NBE**

These multi-purpose, high-efficiency pumps can be applied to a range of demanding applications such as commercial air conditioning and industrial heating. In addition, the NB range is compact, meaning it can be installed in confined spaces – giving our customers greater flexibility.



#### **Grundfos NKE**

These customisable multi-purpose pumps are easy to install and dismantle and are designed for use in building applications. As well as improving reliability and efficiency across systems, the NK range has also been designed for ease of use, making servicing less of a complex procedure.



#### **Grundfos TPE**

Designed to work with both fixed speed and speed-controlled motors, these centrifugal pumps are made for heating, cooling, district energy, and hot water recirculation applications. This pioneering range of pumps also have reliability built into them, meaning they will work better for longer while reducing energy use.



#### **Grundfos MAGNA**

Grundfos MAGNA circulator pumps are designed for commercial-use heating and cooling applications, enabling advanced monitoring and system control. These intelligent pumps have also been designed to be 'maintenance free' due to their canned-rotor type structuring.



Take a look at some of the ways we've helped our customers.



## How intelligent and connected solutions helped Østergaards Hotel optimise energy use

Location: Herning, Denmark.

**Challenge:** Unbalanced system due to outdated and incorrect pumps, leading to hot water being wasted. **Grundfos solutions:** Energy-efficient pumps and Grundfos BuildingConnect.

**Result:** Østergaards Hotel now has the tools it needs to better monitor, control, and optimise its HVAC and water systems. During the first seven months of the new system, the hotel reduced its energy use by approximately 75,000 kWh, equivalent to roughly USD 7,000 in savings.



# How a new cooling system helped Shelbourne Hotel maintain its 5-star rating

Location: Dublin, Ireland.

**Challenge:** Pump damage due to inefficiently sized rooftop chillers and chilled-water pumps, leading to greater discomfort for guests.

**Grundfos solution:** Twin-pump Grundfos TPE units. **Result:** The hotel's engineering team have more control over the pump system, allowing them to better monitor factors such as temperature while also making sure issues are caught ahead of time before they impact guests.



## How a pump system upgrade helped the Hilton Hua Hin reduce energy use by a third

**Location:** Hua Hin, Thailand.

**Challenge:** Unnecessary energy consumption due to old chiller and condenser pumps.

**Grundfos solution:** 4x LS pumps, 2x CUEs, DP transmitter, online monitoring platform, and a 5-year maintenance contract.

**Result:** With their new setup the hotel has cut energy use by 36% – equivalent to roughly 120,000 kilos of CO<sub>2</sub>.

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