

### Exhaust air from NIBE





Nature can be warm and loving, as well as cold and fierce.
She is our greatest source of energy, and we depend on her to bring life into everything around us.

Being born in the harsh environments of the Nordics means we are not only used to strong climate contrasts, we have to thrive no matter the circumstances.

Whether it's a freezing winter or a hot summer afternoon, the need for a balanced indoor climate have always been an essential part of our everyday life.

Our products provide cooling, heating, ventilation and hot water to your home, enabling you to regulate your energy consumption, creating the perfect indoor climate. And by using local natural power, together we can build a more sustainable future.



### Indoor comfort is in our nature

Nature inspire us to create the perfect climate conditions for our everyday lives. Welcome to our world of indoor comfort.



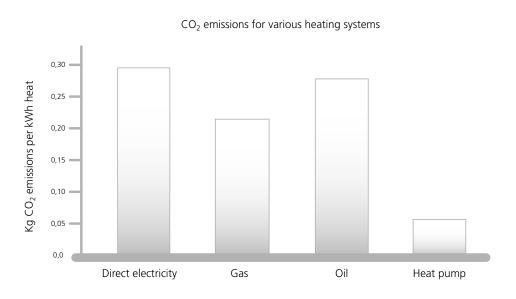


# New times call for a new approach

The topic of climate issues has never been more discussed than today. Taking action and actually changing the way we interact with our planet's resources has become a necessity that none of us can afford to ignore.

A majority of the harmful emissions from an average home is caused by its heating and hot water systems. Oil, coal and gas needs to be replaced by energy sources that don't cause irreversible damage to our nature.

With over 50 years of manufacturing climate solutions, we invite you to take part in building a more sustainable future. We stay true to our legacy by harvesting natural energy, and by combining it with new smart technology we can offer even more efficient solutions that benefit everyone. Our wide range of products provides not only cooling, heating, ventilation and hot water to your home – it also does so with minimal impact on nature.

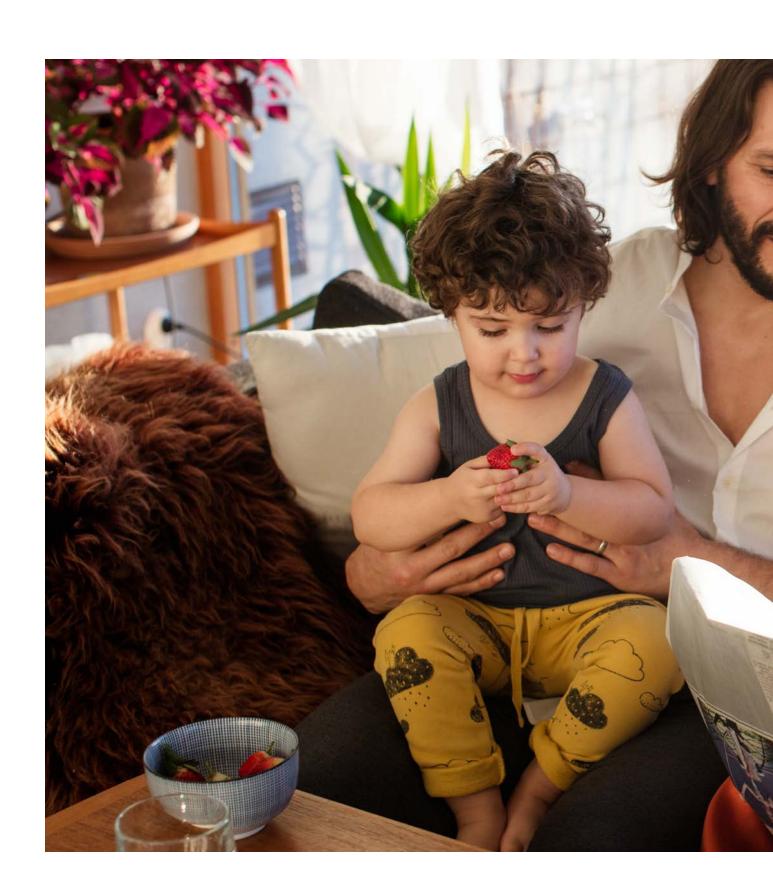


## Start with a heat pump from NIBE

When making the switch from fossil fuels to renewable energy, you will experience benefits across the board. Not only will you do the environment a favor, you will save money by doing so.

With a heat pump from NIBE, you can create a perfect indoor climate by using renewable energy from your local surroundings. It immediately starts to deliver an environmental payback in the form of reduced energy consumption and emissions.

Since electricity is not the main energy source for the heat pump, the amount of electricity required is relatively low. It is only needed to drive the pump and enable the heat extraction process, allowing you to save up to 75% of your energy costs. With energy prices continually rising, you're unlikely to regret your decision. In fact, you'll start enjoying savings from the first month.



## Let your home breathe



### Exhaust air heat pumps

Create the perfect level of comfort in your home by reusing the energy from warm indoor air as it passes through your ventilation system.

Extract energy from the indoor air with an exhaust air heat pump. With an exhaust air heat pump from NIBE you can heat, ventilate and supply hot water to your home simply and efficiently. Create the perfect indoor climate by reusing the energy from the warm indoor air as it passes through your ventilation system.

An exhaust air heat pump is a profitable solution for new builds of up to 200 m<sup>2</sup> and sometimes even bigger than that. Using mechanical exhaust air ventilation enables you to reduce heating and hot water costs by a third or more compared to a conventional electric boiler. The rest is free!

Energy costs can be reduced using renewable energy, while doing the environment a favour.

**PRODUCTS** 

Exhaust air heat pump units

NIBE F730

NIBE F750

NIBE F370

NIBE F470

NIBE F110

#### Exhaust air heat pumps from NIBE **Products**

#### NIBE F730

NIBE F730 is an intelligent exhaust air heat pump. NIBE F730 provides heating, ventilation, heat recovery and hot water efficiently, simply and economically. With its attractive, stylish design and compact size, the heat pump is easy to accommodate and install, both in new-builds and when upgrading an existing heat pump.

The heat pump's inverter control produces an extremely high and economical heat output. NIBE F730 is well insulated and energy efficient, which minimises heat loss and keeps energy consumption to a minimum.

Thanks to smart technology, the product gives you control over your energy consumption and will be a key part of your connected lifestyle. The efficient control system automatically adjusts the indoor climate for maximum comfort, and you do nature a favour at the same time.







- Output regulated, all-in-one product.
- · High heat output with minimal energy consumption for both new dwellings and the renovation and replacement market.
- Connected home with smart technology for a simpler life.

		F730
Space heating efficiency class of the system 35°C / 55°C¹¹		A+++/A++
Space heating efficiency class 35°C / 55°C		A++/A++
Declared tap profile/efficiency class hot water heating		L/A
SCOP <sub>EN14926</sub> average climate, 35°C / 55°C		4.35/3.38
SCOP <sub>EN14825</sub> cold climate, 35°C / 55°C		4.65/3.57
Nominal heating output (P <sub>design</sub> )	kW	5
Output data according to EN 14511 Specified heating output (P <sub>H</sub> ) <sup>2)</sup>	kW	1.27
Output data according to EN 14511 COP <sup>2)</sup>		4.79
Output data according to EN 14511 Specified heating output (P <sub>H</sub> ) <sup>3)</sup>	kW	1,53
Output data according to EN 14511 COP <sup>3)</sup>		5,32
Output data according to EN 14511 Specified heating output (P <sub>H</sub> ) <sup>4)</sup>	kW	5,35
Output data according to EN 14511 COP4)		2,43
Sound effect level according to EN 12102 (L <sub>W(A)</sub> )5)	dB(A)	40–55
Rated voltage	V	400V 3N ~ 50Hz
CO <sub>2</sub> -equivalent	ton	1.312
Volume, hot water tank	litre	180
Height (excl inverter box incl feet) / Width / Depth	mm	2000-2025/600/610
Weight complete heat pump (Copper)	kg	207

<sup>&</sup>lt;sup>1)</sup> Scale for the system's efficiency class room heating: A+++ to G. Reported efficiency for the system takes the product's temperature regulator into account.
<sup>2)</sup> Scale for the product's efficiency class room heating: A++ to G. <sup>3)</sup> Scale for efficiency class hot water: A to G. <sup>2)</sup>A20(12)W35, exhaust air flow 30 l/s (108 m³/h) min compressor frequency. <sup>3)</sup>A20(12)W35, exhaust air flow 70 l/s (252 m³/h) max compressor frequency. <sup>5)</sup>The value varies with the selected fan curve. For more extensive sound data including sound to channels visit www.nibe.eu.



### Exhaust air heat pumps from NIBE *Products*

#### NIBE F750

NIBE F750 is an intelligent exhaust air heat pump for multisystems. NIBE F750 provides heating, ventilation, heat recovery and hot water efficiently, simply and economically. With its attractive, stylish design and compact size, the heat pump is easy to accommodate and install.

The heat pump's inverter control produces an extremely high and economical heat output. NIBE F750 is well insulated and energy efficient, which minimises heat loss and keeps energy consumption to a minimum. NIBE F750 is ready for connection to solar systems and external energy sources. This multisystem can also be docked to several different accessories, e.g. the supply air module NIBE SAM 40.

Thanks to smart technology, the product gives you control over your energy consumption and will be a key part of your connected home. The efficient control system automatically adjusts the indoor climate for maximum comfort, and you do nature a favour at the same time.



- · All-in-one product which is easy to accommodate and install.
- One control module for the entire climate system and greater flexibility for several different systems and dockings.
- Connected home with smart technology for a simpler life.

	·	F750
Space heating efficiency class of the system 35°C / 55°C¹¹		A+++/A++
Space heating efficiency class 35°C / 55°C		A++/A++
Declared tap profile/efficiency class hot water heating		L/A
SCOP <sub>EN14825</sub> average climate, 35°C / 55°C		4,35/3,38
SCOP <sub>EN14825</sub> cold climate, 35°C / 55°C		4,65/3,57
Nominal heating output (P <sub>design</sub> )	kW	5/5
Output data according to EN 14511 Specified heating output (P <sub>H</sub> ) <sup>2)</sup>	kW	1.27
Output data according to EN 14511 COP <sup>2)</sup>		4.79
Output data according to EN 14511 Specified heating output (P <sub>H</sub> ) <sup>3)</sup>	kW	1.53
Output data according to EN 14511 COP <sup>3)</sup>		5.32
Output data according to EN 14511 Specified heating output (P <sub>H</sub> ) <sup>4)</sup>	kW	5.35
Output data according to EN 14511 COP4)		2.43
Sound effect level according to EN 12102 (L <sub>W(A)</sub> ) <sup>5)</sup>	dB(A)	40-55
Rated voltage	V	400V 3N ~ 50Hz
CO <sub>2</sub> -equivalent	ton	1.312
Volume, hot water tank	litre	180
Height (excl inverter box incl feet) / Width / Depth	mm	2100-2125/600/610
Weight complete heat pump (Copper)	kg	225

<sup>&</sup>quot;Reported efficiency for the system takes the product's temperature regulator into account. 2/A20(12)W35, exhaust air flow 90 m3/h (25 l/s) min compressor frequency.

<sup>31</sup>A20(12)W35, exhaust air flow 70 l/s (252 m3/h) min compressor frequency. 41A20(12)W45, exhaust air flow 70 l/s (252 m3/h) max compressor frequency

<sup>&</sup>lt;sup>5)</sup>The value varies with the selected fan curve. For more extensive sound data including sound to channels visit www.nibe.eu.

#### Exhaust air heat pumps from NIBE **Products**

#### NIBE F370

NIBE F370 is an all-in-one exhaust air heat pump which provides heating, ventilation, heat recovery and hot water efficiently, simply and economically. With its attractive, stylish design and compact size, the heat pump is easy to accommodate and install.

With its built-in water heater, immersion heater, circulation pump, fan and control system, the heat pump provides a reliable and economical source of heat. The heat pump can be connected to any low-temperature distribution system, e.g. radiators, convectors or underfloor heating. NIBE F370 can be connected to other heat sources, e.g. district heating.

Thanks to smart technology, the product gives you control over your energy consumption and will be a key part of your connected home. The efficient control system automatically adjusts the indoor climate for maximum comfort, and you do nature a favour at the same time.







room heating, 55 °C

room heating, 35 °C

- · Heating, hot water, ventilation and heat recovery.
- · Cost-effective residential heating for for new dwellings but also for renovation and replacement market.
- · Connected home with smart technology for an easier way of life.

		F370
Space heating efficiency class of the system 35°C / 55°C¹¹		A+/A+
Space heating efficiency class 35°C / 55°C <sup>2)</sup>		A+/A+
Declared tap profile/efficiency class hot water heating <sup>3)</sup>		L/A
SCOP <sub>EN14825</sub> average climate, 35°C / 55°C		3,55 / 2,98
SCOP <sub>EN14825</sub> cold climate, 35°C / 55°C		3,35 / 2,83
Nominal heating output (P <sub>design</sub> )	kW	3
Output data according to EN 14511 Specified heating output $(P_{\rm H})^{\rm 4j}$	kW	2,18
Output data according to EN 14511 COP4)		3,93
Output data according to EN 14511 Specified heating output $(P_{\rm H})^{50}$	kW	2,03
Output data according to EN 14511 COP <sup>5)</sup>		3,24
Output data according to EN 14511 Specified heating output $(P_{\rm H})^{\rm 60}$	kW	1,88
Output data according to EN 14511 COP <sup>6)</sup>		2,74
Sound effect level according to EN 12102 $(L_{W(A)})^{7}$	dB(A)	46,5/48,0
Rated voltage	V	400 V 3N – 50Hz
Volume, hot water tank	litre	170
Height (excl inverter box incl feet) / Width / Depth	mm	2100–2125/600/615
Weight complete heat pump (Copper)	kg	202

Scale for the system's efficiency class room heating: A+++ to G. Reported efficiency for the system takes the product's temperature regulator into account.

Scale for the product's efficiency class room heating: A++ to G. SScale for efficiency class hot water: A to G. ASC0(12)W35, exhaust air flow 56 l/s (200 m³/h) min compressor frequency.

<sup>9</sup>A20(12)W45, exhaust air flow 42 l/s (150 m³/h) min compressor frequency 9A20(12)W55, exhaust air flow 31 l/s (110 m³/h) max compressor frequency.

<sup>&</sup>lt;sup>7)</sup>The value varies with the selected fan curve. For more extensive sound data including sound to channels visit www.nibe.eu.

### Exhaust air heat pumps from NIBE *Products*

#### NIBE F470

NIBE F470 is an all-in-one exhaust and supply air heat pump which provides heating, ventilation, heat recovery and hot water efficiently, simply and economically. With its attractive, stylish design and compact size, the heat pump is easy to accommodate and install.

With its built-in hot water tank, immersion heater, circulation pump, fans and control system, the heat pump provides a reliable and economical source of heat. The heat pump can be connected to any low-temperature distribution system, e.g. radiators, convectors or underfloor heating. NIBE F470 can be connected to other heat sources, e.g. district heating.

Thanks to smart technology, the product gives you control over your energy consumption and will be a key part of your connected home. The efficient control system automatically adjusts the indoor climate for maximum comfort, and you do nature a favour at the same time.









System efficiency class room heating, 55 °C

- · Heating, hot water, supply air, ventilation and heat recovery.
- Cost-effective residential heating for for new dwellings but also for renovation and replacement market.
- · Connected home with smart technology for an easier way of life.

		F470
Space heating efficiency class of the system 35°C / 55°C¹¹		A+/A+
Space heating efficiency class 35°C / 55°C <sup>2)</sup>		A+/A+
Declared tap profile/efficiency class hot water heating <sup>3)</sup>		L/A
SCOP <sub>EN14825</sub> average climate, 35°C / 55°C		3,58 / 2,98
SCOP <sub>EN14825</sub> cold climate, 35°C / 55°C		3,70 / 3.08
Nominal heating output (P <sub>design</sub> )	kW	3
Output data according to EN 14511 Specified heating output (P <sub>H</sub> ) <sup>4)</sup>	kW	2,18
Output data according to EN 14511 COP <sup>4)</sup>		3,93
Output data according to EN 14511 Specified heating output (P <sub>H</sub> ) <sup>5)</sup>	kW	2,03
Output data according to EN 14511 COP <sup>5)</sup>		3,24
Output data according to EN 14511 Specified heating output (P <sub>H</sub> ) <sup>6)</sup>	kW	1,88
Output data according to EN 14511 COP <sup>6)</sup>		2,74
Sound effect level according to EN 12102 (L <sub>W(A)</sub> ) <sup>7)</sup>	dB(A)	51,5–54,5
Rated voltage	V	400 V 3N – 50Hz
Volume, hot water tank	litre	217
Height (excl inverter box incl feet) / Width / Depth	mm	2100–2125/600/615
Weight complete heat pump (Copper)	kg	212

<sup>13</sup> Scale for the system's efficiency class room heating: A+++ to G. Reported efficiency for the system takes the product's temperature regulator into account.

<sup>2)</sup> Scale for the product's efficiency class room heating: A++ to G. 3) Scale for efficiency class hot water: A to G. 4) A20(12)W35, exhaust air flow 200 m<sup>3</sup>/h (56 l/s) min compressor frequency.

<sup>9</sup>A20(12)W45, exhaust air flow 42 l/s (150 m³/h) min compressor frequency 9A20(12)W55, exhaust air flow 31 l/s (110 m³/h) max compressor frequency

<sup>&</sup>lt;sup>7)</sup>The value varies with the selected fan curve. For more extensive sound data including sound to channels visit www.nibe.eu.



### Exhaust air heat pumps from NIBE *Products*

#### NIBE F110

The NIBE F110 is a water heater with built-in heat pump for energy-efficient hot water production.

The NIBE F110 provides great savings thanks to the large compressor with intelligent controls and recovers energy from the outdoor air or through heat recovery of ventilation air.

The NIBE F110 has a display with easy-to-read menus which facilitate the setting of pleasant hot water comfort. Hot water and ventilation can be scheduled for every day of the week or for longer periods.





- Energy-efficient hot water production with heat pump technology.
- Great savings with energy recovery for houses that use direct electricity.
- Recovers energy from ventilation air or outdoor air.

NIBE F110			
Volume hot water heater	liter	265	
Capacity warm water 40 °C Volume hot water heater	liter	365	
Shower minutes (10 litres/min)		approx. 36 min	
Energy efficiency class/Load profile for water heating <sup>1)</sup>		A/XL	
Height/Width/Depth	mm	2060/600/605/	
Weight	kg	144	

<sup>&</sup>lt;sup>1)</sup> Scale for efficiency class hot water: A+ to F



# Sustainable indoor comfort – every day



### Additional functions

Turn your climate system complete with accessories, dockings, and solutions for your ground source units.

GSM remote control Communication unit for remote control and monitoring.

Modbus Monitor and control your heat pump via Modbus.

PV solar package Our solar panels are available in packs in range of 3 kW

to 21 kW, and are suited to fit on most types roofs – tiles, metal roofing, seamed metal roof and felt roof.

Room display Control and monitor your heat pump from rooms

outside of the one containing the heat pump. The room display also has a built-in temperature sensor.

Water heaters Regardless of your hot water needs, we have the right

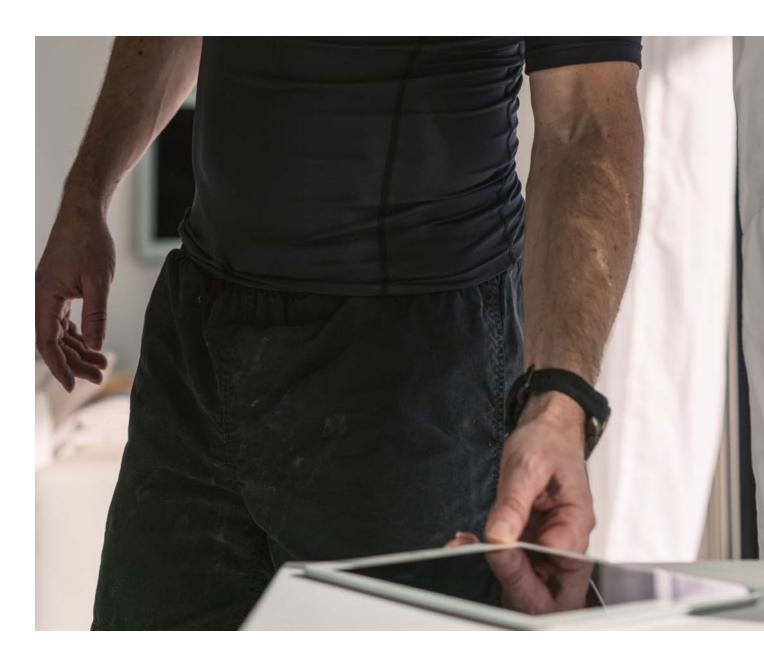
solution for you. Our full range of hot water solutions complement our selection of heat pumps and biomass

boilers.



### A connected indoor system

We strive to maximise the outcome of every product carrying the NIBE name, while always focusing on the system as a whole through connectivity and flexibility. Controlling everything with its software, the system allows you to integrate products within your home to create a balanced indoor climate with minimal impact on the environment.



### Exhaust air heat pumps from NIBE Sustainable indoor comfort – every day

#### NIBE UPLINK

#### Freedom - anywhere, any time

Using the Internet and NIBE Uplink you can get a quick overview and the present status of your heat pump and the heating in your property. You get a good overall view where you can follow and control your heating and hot water production. If your system is affected by an operational disturbance you receive an alert via e-mail that allows you to react quickly.

- An efficient tool that gives you quick and easy control over your property's heat pump wherever you are.
- Clear, easy way of monitoring and controlling heating and water temperatures for maximum comfort.
- Provides logging of heat pump parametres presented in a user-friendly history chart.

**PUBLIC API** 

API functionality for external integration of e.g home management systems and BMS.

**IFTTT** 

A free web-based service that enables you to really make full use of your smart home technology. Connect products and services in your home for maximum comfort.

SMART PRICE ADAPTION

This is a clever feature if you have the option to choose variable pricing for your energy plan. You will then automatically purchase energy when the price is low, and use self-produced or stored energy when the price is high.





# Smart, sustainable energy solutions from NIBE

NIBE Energy Systems offers a complete range of energy-efficient solutions for heating, ventilation, cooling, hot water and heat recovery that enable private and commercial property owners to choose a system that best suits their indoor climate needs.



### Exhaust air heat pumps from NIBE Sustainable indoor comfort – every day

### Air/air heat pumps

If you still rely on electrical heating, an air/air heat pump is a suitable and economical solution for an ideal indoor climate. It enables you to regulate your energy consumption in a cost-effective and environmentally responsible way.

### Exhaust air heat pumps

Installing an exhaust air heat pump is a profitable and easy way to warm up your home, supply it with hot water and keep it well-ventilated. Reuse the energy from the warm indoor air as it passes through your ventilation system to create an ideal solution for your modern home.

### Ground source heat pumps

Ground source heat is stored solar energy harvested from deep within the ground, the bottom of lakes or simply just below your lawn. The system supplies your home with both heat and hot water during colder winter months, as well as cooling during hot summer days.

### Air/water heat pumps

Investing in an air/water heat pump, gives you two systems to choose from – Monobloc and Split. Both contains an outdoor and indoor module creating a complete heating and hot water system. Using one of nature's free and renewable energy sources, the air/water heat pump will in the long run pay for itself.

### Solar panels

Start producing your own energy with solar products from NIBE. When connected to your smart heat pump, the pump till multiply the energy you harvest. By integrating products into one system, you can reduce your energy costs and use renewable energy efficiently.

### Domestic boilers

If you want to use a renewable biofuel, a wood-fired boiler is an ideal solution for a countryside home. Combine a biomass boiler with other energy sources and connect these to your heat pump. Use Smart Energy Source to establish the most sustainable and economical indoor system.

### Water heaters

Creating water solutions for over 50 years, NIBE now enables controlling your water heater remotely with smart technology. Recognizing user patterns and adapting to improve energy usage, our full range of hot water solutions complements our selection of heat pumps and biomass boilers.

### Your next step?

Find your local NIBE office at www.nibe.eu. They'll help you locate your nearest NIBE installer and select the best kind of heat pump for your needs.



European Directive 20/20/20

The 20/20/20 European directive imposes compulsory targets on the EU's 27 member states, specifying that 20% of energy consumption must be met by renewable sources by 2020. Since NIBEs heat pumps are now classified as a renewable energy source, their installation will help member states reach this ambitious target. And in many cases, local or regional authorities are offering home owners subsidies to switch their existing heating systems to a renewable source such as a heat pump.



NIBE Energy Systems P.O. Box 14, 285 21 Markaryd, Sweden Tel. +46 433-27 30 00 nibe.eu

This brochure is a publication from NIBE Energy Systems. All product illustrations, facts and specifications are based on current information at the time of the publication's approval. NIBE makes reservations for any factual or printing errors in this brochure.

©2018 NIBE ENERGY SYSTEMS Photos by www.benfoto.se and NIBE.