



**HEAT PUMPS ARE LIKE  
APPLES AND PEARS**  
IS AN EIGHT ALWAYS AN EIGHT?

**ECONOMICAL FINANCING  
FOR SMÅLAND'S HEAT PUMPS**

# Sweden, the world and service

THE SWEDISH HEAT PUMP market suddenly experienced a sharp upturn in April. From a moderate rate of growth in the first quarter to an extremely strong month in the spring, NIBE is on that bandwagon and obviously your input is crucial too. European markets remain fairly hesitant and cautious, so it is pleasing to see that more and more houses are being constructed in Sweden and that heat pumps are being installed at an increasing rate.

The fastest rate of growth is in the exhaust air heat pump segment which represents just over one third of the entire Swedish heat pump market in the first four months of the year. We are seeing an increase across all heat pump categories except, surprisingly enough, commercial heat pumps. This category is experiencing a slight decline but we expect it to be temporary. Our market share in general remains extremely strong! Thanks for all your hard work!

THE FACT THAT A CUSTOMER in Asmundtorp has now had to discard his NIBE water heater after an incredible 61 years of regular use is proof that a copper boiler from Markaryd is the right choice when it comes to quality. The service life of that particular heater was approximately ten times that of a simpler enamelled heater that is produced and used further south in Europe.

JUST OVER THIRTY international markets were represented in Markaryd at a major international sales event in May. There was a steady succession of excellent marketing campaigns, product briefings and inspirational presentations. Our newly-acquired, market-leading North American

heat pump company, WaterFurnace, was present at the event, lending it a more international lustre. Everyone is in unanimous agreement about the excellence of heat pump technology and the potential of future conversion of conventional and outdated product options based on fossil fuels.

Immediately after the international onrush, we welcomed more than 80 key Swedish partners to Markaryd. These proficient specialists, representing 43 service firms from across the country, from Piteå in the north to Malmö in the south, spent a couple of days exchanging valuable experience and catching up on the latest developments in all the relevant areas. It was obvious from the easy-going, friendly atmosphere that the participants enjoy meeting up again at these regular annual events. Without a doubt, our efficient technical support and competent service operations are among our key selling points. Maintaining a high service level is crucial to future success.

WE WISH ALL our partners and readers of Expert News a fantastic summer and look forward to returning with recharged energy for an exciting autumn together!



## NIBE ENERGY SYSTEMS

Sales  
Customer support  
Marketing communication  
Tel: +46 (0)433-73 000

## NORTHERN NORRLAND

Lars-Göran Andersson, UMEÅ  
Tel: +46 (0)433-27 34 54  
Text message: +46 (0)70-209 73 02

## CENTRAL NORRLAND

Patrik Åhman, DOMSJÖ  
Tel: +46 (0)433-27 34 62  
Text message: +46 (0)70-190 04 79

## SOUTHERN NORRLAND

Tommy Landin, HUDIKSVALL  
Tel: +46 (0)433-27 34 65  
Text message: +46 (0)70-213 69 19

## STOCKHOLM

Stefan Lundqvist, STOCKHOLM  
Tel: +46 (0)433-27 34 63  
Text message: +46 (0)73-057 00 02

## Mikael Andersson, STOCKHOLM

Tel: +46 (0)433-27 3557  
Text message: +46 (0)70-570 80 08

## Per Mollstedt, STOCKHOLM

Tel: +46 (0)433-27 34 64  
Text message: +46 (0)70-349 66 17

## WEST

Mikael Albo, FALKÖPING  
Tel: +46 (0)433-27 34 60  
Text message: +46 (0)70-699 5580

## Magnus Ström, KUNGÅLV

Tel: +46 (0)433-27 35 06  
Text message: +46 (0)70-590 3506

## SOUTHWEST

Arne Gustafsson, HALMSTAD  
Tel: +46 (0)433-27 34 55  
Text message: +46 (0)70-942 91 50

## EAST

Magnus Lindberg\*, KUMLA  
Tel: +46 (0)433-27 34 91  
Text message: +46 (0)70-590 11 91

## Tord Beurling, MJÖLBY

Tel: +46 (0)433-27 35 20  
Text message: +46 (0)72-239 03 90

## SOUTH

Fredrik Steiner, HÖLLVIKEN  
Tel: +46 (0)433-27 34 58  
Text message: +46 (0)70-516 39 86

## Fredrik Snygg\*, VITTSJÖ

Tel: +46 (0)433-27 34 57  
Text message: +46 (0)70-190 03 16

## Fredrik Bäckman, MARKARYD

Tel: +46 (0)433-27 35 29  
Text message: +46 (0)730-58 00 98

**NIBE**

\* Sales Manager commercial buildings.

# NEW PRICES AND TAX DEDUCTION CHANGES

## STIR UP THE AIR-TO-WATER HEAT PUMP MARKET

Air-to-water heat pumps are currently one of the heating industry's most price-sensitive segments. Many customers choose air-to-water heat pumps simply because they want to minimise their investment. They also tend to look more at the initial outlay than the long-term cost savings.



"**OUR NEW PRODUCTS** deliver superior performance and thus have short payback periods, even with purchase prices in the upper bracket," says Jonas Thörnqvist, who is Sales Manager for air-to-water heat pumps at NIBE.

"However, for customers with limited investment budgets, the purchase price is often more of a deciding factor than it really should be."

**NIBE LAUNCHED A CAMPAIGN IN APRIL** reducing the cost of its NIBE F2030, NIBE F2300 and NIBE Split by up to 20 per cent. And it didn't take long before the results started to show!

"We are noting a dramatically increasing market share in an expanding market," Jonas remarks.

"We're talking about twice or even three times the volumes for some models."

The possibility of an adverse change to tax relief on home repair and maintenance services (ROT) may have had an effect and we believe it will lead to a greater increase...

This has a major impact in a price-sensitive market like this one.

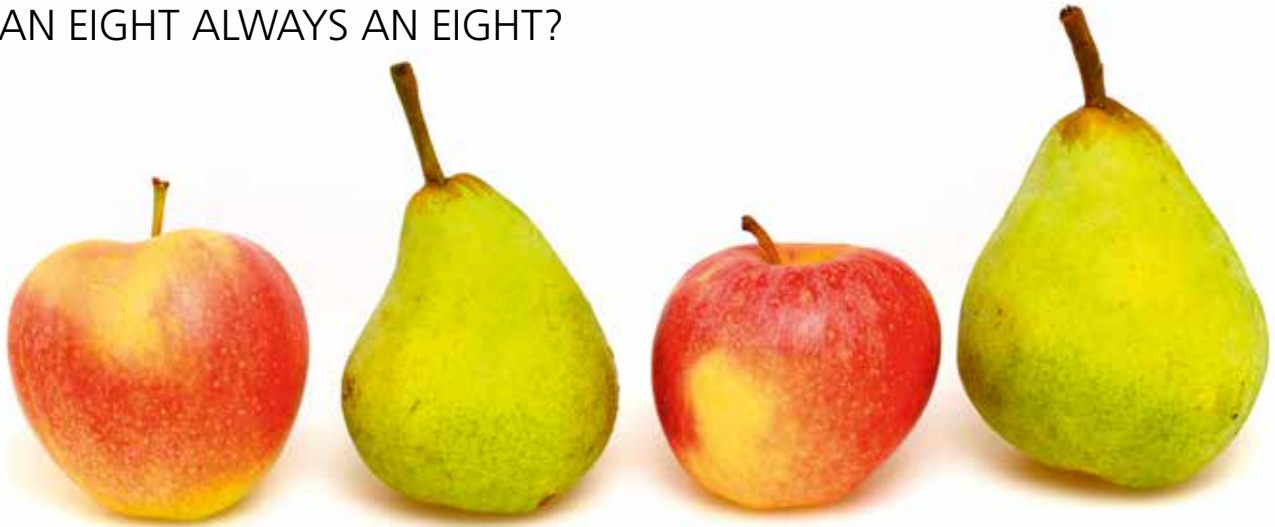
It's also easier to see the effects of the ROT tax relief with this kind of installation where it's "pure" working hours that are being charged.

"I think we're going to see a real boost in sales throughout the campaign in July and August. Anyone who can get orders for installations now will be able to offer their customers an extremely attractive deal!"



# HEAT PUMPS ARE LIKE APPLES AND PEARS

IS AN EIGHT ALWAYS AN EIGHT?



What do the various air-to-air heat pumps really promise? And do they keep their promises? This question might not be all that relevant, because a lot of manufacturers don't in fact promise a great deal. Even if it seems that they do... You see, no standard classification system actually exists for the industry.

**T**he savings estimate is based on trouble-free installation, outstanding quality and a state-of-the-art control system to guarantee years of reliable performance. The market for air-to-air heat pumps has not been easy to understand, to say the least. It has been a fought-over segment involving many players using everything from direct mail with coupons and vouchers to serious players.

However, one thing is undeniable; the person most baffled by it all is the end customer.

The fact that there are so many players from different parts of the world has made it impossible to create a coherent policy for power specifications or nomenclature. NIBE is about to enter the segment and wants this to change.

"We believe it would be good to have a uniform standard, as we have for ground-source heating," says Michael Lindahl, Product Manager for air-to-air and air-to-water heat pumps at NIBE.

"But until such a standard is introduced, we intend to be clear about the products and services we provide and always base them on the needs of customers.

It's all very straightforward when it comes to ground heat or air-to-water heat pumps because everyone measures the performance of these heat pumps in line with the existing European EN 14511 standard," Michael explains.

"This makes it simple for customers to compare 8 kW machines, for example, made by different manufacturers.

It's an entirely different situation with regard to air-to-air heat pumps for which there are no industry standards!

Some manufacturers use the number 5 in the name of their models, for example. This can easily be interpreted to mean that the machine is a "5 kilowatt system". But the manufacturer has never said that the pump will deliver 5 kW of heat or, if it does, at which outdoor temperature. Although it may seem to be implied, it is seldom stated and is thus not wrong - strictly speaking."

"Some manufacturers name their products to indicate the cooling capacity and others to indicate the heating capacity at outdoor temperatures where heating is not even needed," Michael tells us.

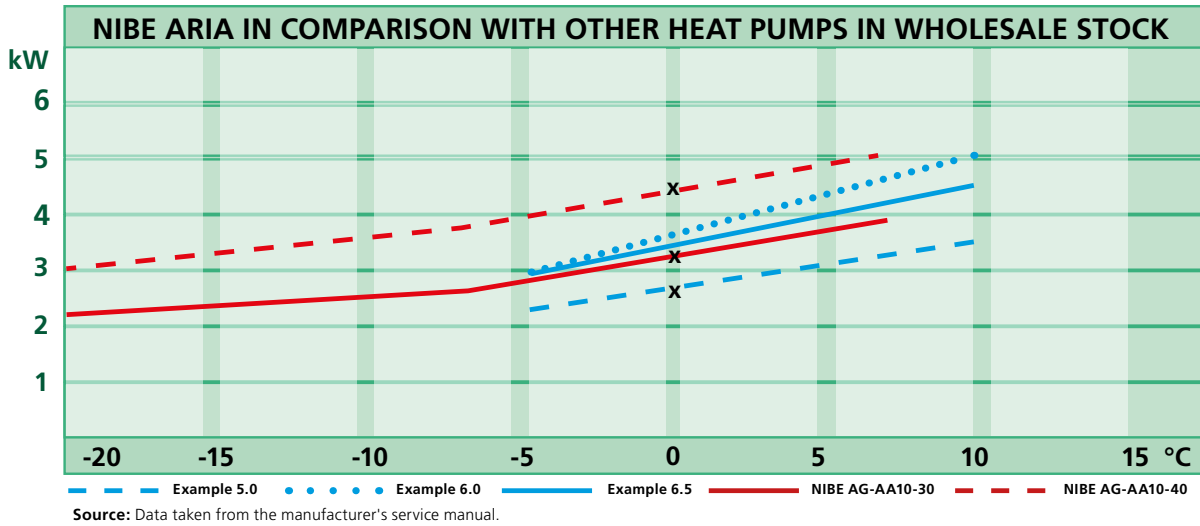
"Others base their names on the British Thermal Unit (BTU) which, unless you know otherwise, can make a pump that produces 3 kW or less look like a 9 kW unit. There is also something called "ton of refrigeration". It's a bit of a jungle when it comes to units and terms."

## STANDARDISATION

NIBE's pumps are rated according to the EN 14511 standard, which requires the output and name to be specified. This means that capacity and performance are measured under standardised and quality-controlled conditions.

"If you compare the curves for machines with similar names, you realise that they often don't even belong in the same chart. It really is like comparing apples with pears."

Michael points out that this can lead to less scrupulous operators trying to sell a product that appears as powerful as a competitor's product, but at a considerably lower price. Whereas what they are actually selling is a less powerful product.



"It means the serious player has to be very explicit and clearly provide the products' performance specifications and explain this," Michael says.

If you look at the chart above, there is one product whose name suggests it is a 5 kW unit, yet it only produces about 2.6 kW at ± 0°C. On the other hand, the NIBE ARIA AG-AA10-30 produces no less than 3.3 kW at the same temperature, and the AG AA10-40 produces 4.3 kW.

In other words, NIBE heat pumps have a higher output, when you need it, than their names indicate.

NIBE's heat pumps are all designed for the Nordic region and deliver reliable performance and superior heating capacity even at low outdoor temperatures. That is to say, when it's most needed.

"Getting customers to understand this is a bit of a challenge for all installers. But if you can get customers to make a fair comparison, you'll also be able to do more business."

## ECONOMICAL FINANCING FOR SMÅLAND'S HEAT PUMPS

NIBE is making it even easier to sell heat pumps.

NIBE and Ikano Bank have entered into a partnership that enables all installers to offer customers a financing solution for the entire investment – from the heat pump to the borehole – without having to go to their regular bank.



**EVERYONE AGREES** that a NIBE heat pump not only cuts the cost of living but also increases the value of a house. However, not many customers have enough money saved to pay for the installation of a heat pump, which means they need to take a loan. Yet many people are reluctant to mortgage their house in order to make such an investment.

"It is more difficult to take out a loan on your house than you might think," says Andreas Johnsson, Product Manager for ground-source heating at NIBE.

"It is often simply because the house has insufficient equity to satisfy the mortgage. There are plenty of inexpensive houses for sale in many areas of Sweden. In combination with a heat pump this can offer very low living costs, but banks still often feel that the collateral is not adequate. Many people also feel uncomfortable about contacting the bank."

**NIBE'S FINANCING OPTION MAKES IT POSSIBLE FOR ANYONE** with an annual

income of SEK 100,000 or more, and who does not have a bad credit history, to apply for a loan to pay for the entire investment. The loan is repaid with a fixed amount each month (annuity). The loan amount is linked to the amount that you offer as an installer.

A down-payment is not required and the loan may be terminated at any time. Nor is the loan linked to a card or any open credit that can lead to the temptation to overspend.

"It is a completely normal personal loan with fair terms and conditions, without you having to pledge your house or anything else to the bank as collateral," Andreas explains.

Compared to other personal unsecured loans, NIBE's Financing option offers competitive terms.

"The loan origination fee is just SEK 150 and the customer does not have to worry about title deeds, bank meetings, administration fees, etc. If a customer were to borrow SEK 50,000 today and pay SEK 1,500 a month, the entire amount would be paid off

after three years and one month. The credit would have cost SEK 5,403 in total, which is just SEK 150 a month."

Customers apply for credit themselves at [www.nibe.se/finansiering](http://www.nibe.se/finansiering). You, the installer, are saved the hassle of asking awkward questions about the customer's financial situation and any specific questions about credit can be forwarded to Ikano Bank.

**THE CUSTOMER GETS AN IMMEDIATE RESPONSE ONLINE** to his or her credit application, which means that you, the installer, can turn the quote into an order while you're sitting with the customer.

Andreas says, "I think this will let us reach entirely new target groups who are looking to cut their energy costs by installing a NIBE heat pump.

And now we are able to help customers who don't have much money saved or don't have a particularly strong relationship with their bank. It's actually these people who need it most".

ENERGY LABELLING FOR

# ALL HEAT PUMPS

**FROM 26TH SEPTEMBER** this year, all heat pumps designed for installations up to 70 kW must display an energy label of the type that we are used to seeing on TVs, refrigerators, etc. The aim is to enable you, the consumer, to compare the energy efficiency of the products. G indicates the least efficient performance and A+++ the most efficient. This is all part of an EU Directive that sets higher demands on drastically lowering our emission levels and energy consumption.

**PRODUCT MARKING**

Heat pumps can display a number of different labels. They all have a product label which provides information about the energy efficiency class, power requirement and noise level. The label also has a map that divides Europe into three different climate zones. A suitable power requirement is specified for each climate. The energy efficiency class displayed on the label is only based on average climate conditions, which can be slightly misleading for those of us in Scandinavia, especially for air-to-water heat pumps. It is necessary to consult the product sheet in order to obtain correct information about how the product performs in cold climates. One should note that the scale only goes up to A++ for space heating and A for domestic hot water.

All energy labelling for space heating is based on energy efficiency over an entire year. Heat pumps also have different energy labels depending on whether radiators or floor heating is used.

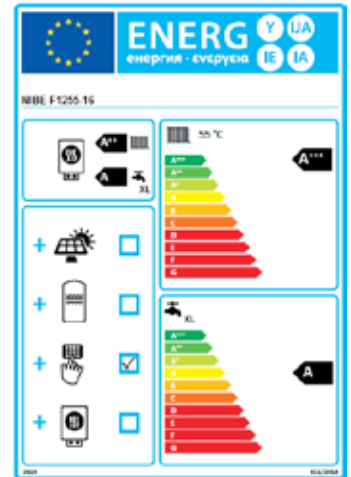
Heat pumps that produce hot water normally belong to energy efficiency Class A. To achieve higher efficiency, they need to be combined with solar heating. The quantity of hot water will also be visualised by a tap symbol indicating sizes (tap profiles) from 3XS to XXL.

**SYSTEM MARKING**

Product marking can be supported with system marking either directly from the manufacturer or you, the installer. The system label shows the energy consumption of the entire heating system and also takes into account how the system is controlled, any external auxiliary boiler and if it is combined with solar heating. Since most heat pumps already have an integrated control system, many of them will have a system label from the manufacturer. If you add a solar collector and other systems, you can easily make your own system label in NIBE DIM.



Product marking for NIBE F1255-16



System marking for NIBE F1255-16

**PRIMARY ENERGY**

The efficiency that determines a product's energy class is based on so-called primary energy. This means that an energy factor of 2.5 is used for products powered by electricity. A factor of 1 is used for products powered by oil or gas.

The 2.5 factor for electrical energy is based on the average efficiency of electricity generation in Europe. The 2.5 factor is used throughout the European Union, although Sweden and other Nordic countries actually have a much lower factor since the electricity we use is far cleaner.

Despite this, heat pumps will end up right at the top of the energy labelling scale. This primary energy factor will make it much tougher for products like electric water heaters to achieve a top rating, as they rarely achieve higher than a Class C rating, despite their excellent insulation.

## We received a letter...

**WE RECEIVED AN EMAIL IN MARCH** about a water heater that had drawn its final breath. But in spite of the sad news, the owner was cheery...

*"Dear sir, I'm not sure if this is of interest to you, but our water heater broke down on 3rd March, which we think is perfectly okay since it was made in 1954 by NIBE. Just thought you might like to know."*

*Yours sincerely,  
Thomas Jönsson, Asmundtorp."*

**A WATER HEATER** that had been used for 61 years. Is that a record? Or do you know of an even older heater?



# NIBE Uplink becomes "APPLINK"

Life has been easier for many installers since the introduction of NIBE Uplink which connects heat pumps to the Internet. NIBE is now taking its system one step further with the release of an app with all the functionalities of NIBE Uplink... plus a few more.

**LAUNCHED IN 2012, NIBE UPLINK** depends on a broadband connection for the heat pump to stay connected to the Internet. This allows property owners and installers to remotely and easily monitor the heat pump as well as make any necessary adjustments. The NIBE Uplink app now makes it even easier to do this.

"The app is designed for optimal use of the user's smart-phone display," says Andreas Johnsson, Product Manager for ground-source heating at NIBE. What's more, you don't need to log in each time after the initial login. Simply click on the icon and you'll be taken straight to your heat pump(s).

Another advantage is that the app can send push notifications directly for situations, such as an alarm. It's common for web-based solutions to send out an email, but people with busy schedules can't be checking their inbox all the time.

A push notification will be sent straight to your smart-phone when an alarm goes off.

**IN ORDER TO USE THE APP,** you need an account with NIBE Uplink. You can open an account simply by visiting [www.nibeuplink.com](http://www.nibeuplink.com).

You then download the free app from App Store or Google Play for both iPhone and Android devices.



## NIBE Compact

GETS A NEW DESIGN

BOTH INSIDE AND OUT

**NIBE'S CLASSIC WATER HEATER** has been given a facelift both inside and out. On the exterior, the front shares the characteristic two-piece look of the new generation of heat pumps and indoor units.

Changes have been made on the inside too, including new and improved insulation and a new design of the frame resulting in the conduction of less heat.

**ALL NIBE COMPACT** units now conform to the new requirements of the European Union's Directive 2009/125/EC, which comes into force on 26th September this year.

# THERE'S SO MUCH HEAT OUT THERE...

– Just waiting to be collected

Some 30 years ago the Swedish company NIBE started to manufacture ground source heat pumps. What was then seen as a novelty is today the primary source of heating in new houses in large parts of Scandinavia. Heat pumps has also played a major part in Sweden reducing its dependency of fossil fuels for heating by close to 80%.

And as someone said – if it can heat a house in Scandinavia, it can heat a house anywhere!

**TODAY NIBE IS A MAJOR** player in the heating industry with an annual turnover of some € 900 million and more than 6,000 employees on three continents.

A large part of this is the result of the success of ground source heat pumps. With the aid of a ground source heat pump, solar energy stored in the ground can be collected and used to heat homes and commercial buildings.

Warmth builds up underground from

the first days of spring when the surface of the earth starts to thaw, to high summer, when the rays of the midday sun penetrate deep down into the ground. By the time the autumn leaves are falling, there's enough energy stored in the ground to heat up any house throughout the coldest winter. A heat pump collects and upgrades this naturally occurring warmth.

Even a wet and cool summer can still provide enough energy to maintain a

comfortable indoor temperature in the coming winter.

If at any point it gets too hot inside the house, the same system can be used for cooling.

Drawing on the lower temperature underground (between 4 and 12 C° ) passive cooling also exploits nature's own resources – simply for cooling instead of heating.

It's amazing, but true.

## THREE KINDS OF HEAT PUMPS

Heat pumps is a word with many different meanings. Today NIBE produces three kinds of heat pumps.

### Exhaust air heat pumps

An exhaust air heat pump ventilates the building and recovers the energy in the warm air, reusing it to warm up your sanitary water and fuel a central heating system. Ideal for heating domestic premises and tap water.

### Ground source heat pumps.

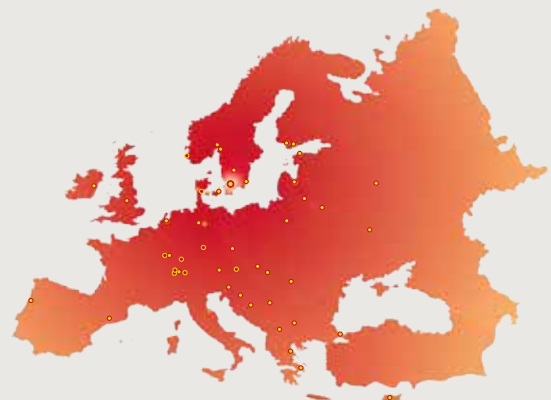
Drawing heat from surface soil, bedrock or the water in a nearby lake, this is a great option for heating houses, multiple-unit properties and other larger buildings. Available with or without an integrated water heater.

### Air/water heat pumps

These pumps extract heat from the ambient outside air. In contrast to simpler types of air-to-air heat pumps, they are connected to the building's heating system and are able to produce both heat and hot water.

## HEAT PUMPS MEAN RENEWABLE ENERGY!

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 ground source 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.



● NIBE Energy Systems  
● Schulthess Group AG

NPN GB NIBE Expert News 1532-2



**NIBE ENERGY SYSTEMS**  
BOX 14, 285 21 MARKARYD, SWEDEN  
Tel: +46 433 - 73 000  
[www.nibe.eu](http://www.nibe.eu)