

# Pellets – a sustainable solution for Västra Götaland, Sweden

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## Purpose of the project

A purpose of the project "Pellets for Europe" is to:

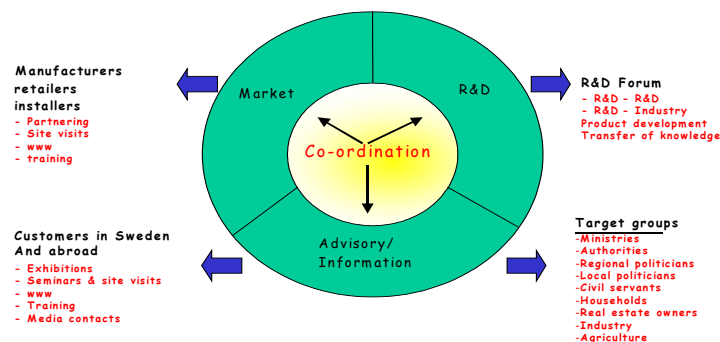
- increase the use of pellets in region of West Sweden
- increase the export of related technology and knowledge from the region

By increasing the knowledge about pellets and its economical and environmental advantages a good foundation for growth is created. To develop the trade and industry within the region the programme holds activities to stimulate the knowledge transfer between industry, installers, consultants, counsellors, research institutes and other key actors. In this way product development, marketing, training and exports are motivated.

## Programme structure

Regional key actors control the pellets programme in the region – manufacturers of pellet products, counsellors, consultants, authorities and research institute are represented in the steering committee. In order to minimize the uncertainty of the supply of pellets as well as the price development the steering committee stimulated the development of a branch association, which amongst other thing has developed insurance solutions for pellet equipment.

## Regional actions for pellets



## Accomplished activities and results

### Information about the market

The website [www.EnergyCentre.Info](http://www.EnergyCentre.Info) has information about pellets and manufacturers of boilers, burners and stoves. Here you can find market surveys and all sales places of pellets within the region. Since 2004 you can also find solar heating products and manufacturers.



### Partnering

Partner activities have been participation on exhibitions in Sweden and in Europe with marketing of manufacturers from West Sweden. Example of exhibitions attended is: Ecology in Göteborg 2002, 2003, Pellets 2002 in Stockholm, London 2002, 2003, Wales 2003, Wels in Austria Jan 2004.

Foreign study groups have been received from Germany, UK, Austria and Spain and they have visited west Swedish companies. Due to these 3 pelletising units have been sold to UK.

### Market survey

170 pellet burner owners were questioned about their experiences with pellets. It was established that the uncertainty of the customers was large considering the supply of pellets as well as the price development.

### Branch association

As a follow up on the market research and a tendency of falling sales numbers for burners and stoves while heat pump sale increase, a branch association was formed. At the same time a common insurance solution was formed in the branch associations Pellsam regime. The association's web site is [www.pellsam.se](http://www.pellsam.se).



### Seminars

Several seminars and information exhibitions have been arranged in the region, this in cooperation with the municipal energy advisors in the region. The seminars/exhibitions – the so called Energy Train - have been in connection with a solar project and promoted both pellets and solar heating, and they were arranged on 50 places around the region and included major pellets stakeholders at all places.

### Good examples

A permanent exhibition on pellets equipment has been opened on a central place in the region. Here all different types of pellet equipment are shown and the exhibition is opened to the public.



## Education

Installers, chimneysweepers, insurance and environmental civil servants has been offered a two-day education about pellets and pellets technique. The installers have also had the opportunity to further education and to be certified as “pellet installers”.

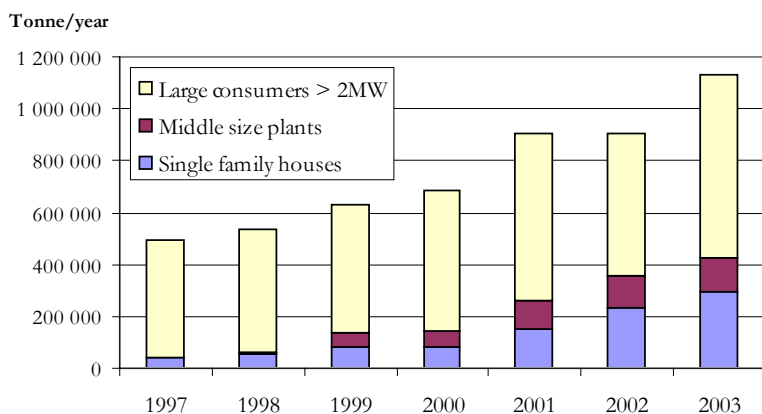
## R&D

A research network had been established in Sweden with 33 researchers. The research about pellets has been surveyed and new research has been initiated. The network has continuously newsletters and network meetings. Contact seminars has been arranged in order to bring pellets manufacturers and researchers together. IN addition, the researchers have been writing articles in the press to ensure the health effects of pellets for a broader public.

## **Market development**

The figure below shows the use of pellets in Sweden during 1997- 2003. In 2003 the new level of 1.1 million tonnes of pellets was reached. The number of pellets customers has during 2003 passed 50 000, and the supply of pellets was very good – no lack of pellets.

## Use of pellets in different customer segments 1997-2003



Source: PiR

## Pellets for Europe 2004-2005

The regional programme EnergyCentre.Info/Pellets was expanded through cooperation with the EU project Pellets for Europe. The project has partners from Austria, Britain, Germany, Slovakia and Bulgaria. The project focuses on a European research network, establishment of a pellets network, seminars and information to households as well as partnering activities. The European commission, the Swedish Energy Agency, the region of West Sweden and the pellet industry finance the project.

The expanded pellets programme work in close cooperation with the pellets industry, installers and manufacturers. Some of the activities in the project are presented below:

	<b>Activities</b>
Information about the market	Develop website, market actor lists, information brochures
Information via media	Press information, writing articles
Seminars for local and regional key actors	Seminars and lectures about pellets
Good examples	Market small plants with pellets and solar heating in West Sweden. Establish a permanent exhibition of pellets equipment as a meeting point.
Increase the export of regional technology	Be a link between authorities, industry and the market. Establish national and international contacts. Partnering via mutual exhibition posters and study tours, create market profiles. Cooperate with the trade council.
Survey of new Swedish pellets production	Potential for pellets production in Sweden
Research and Development	Establish international and national research networks, be a forum for Swedish research within the pellets area. Contacts with the industry for project initiation, a link between researchers and manufacturers, and arrange seminars.

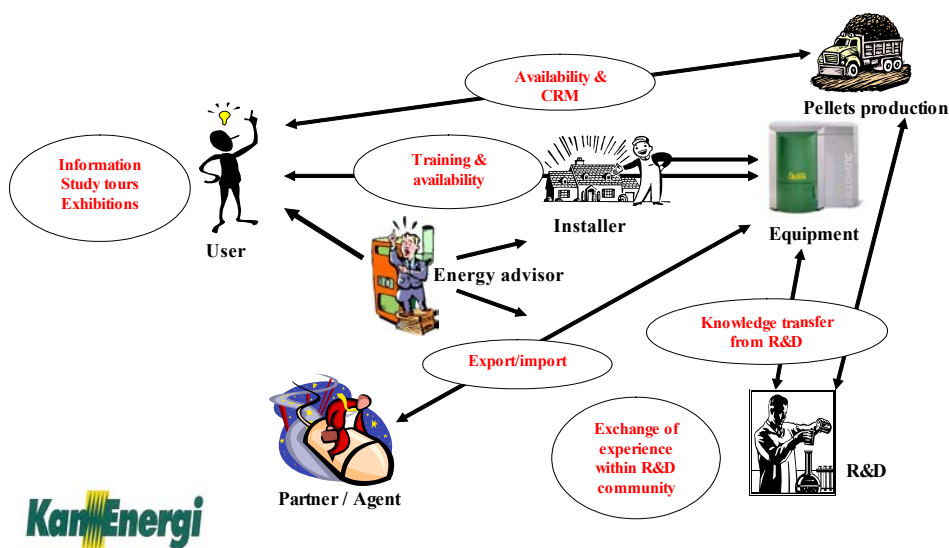
## Conclusions

Within the EnergyCentre.Info a large number of projects have been started to increase the use of pellets. The ambition has been to increase the use of pellets as well as increase the business for regional companies. Within the programme a large amount of valuable information has been raised. We can say that we have pushed the positions of pellets knowledge forward.

A large amount of meetings between consultants, manufacturers, retail companies and installers as well as counsellors has given a better understanding about each other's roles in the market.

The meetings have also been visited by more recent discovered competence areas such as communication and design and not to mention the solar heating industry with which closer cooperation is discussed to produce new competitive product system.

## Västra Götaland & pellets



So far the efforts have not given the increased market development we have hoped for. The sale of pellet burner and boilers is about the same in 2003 as it was in 2002. The stoves has increased it sale comparing 2003 and 2002 by about 30 %.

The pellet industry is today in a gap between heat pumps with high heating comfort but expensive to buy and wood boiler with very low heating comfort but with low operational costs.

Also the solar heating industry has stagnated during the last years. The increase that has occurred earlier can clearly be connected to the subsidies made by the government.

The questions asked then are: Do the pellets and solar heating industry know what the customers want? Is the pellets industry a niche between investment cost, comfort and

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energy prices? Are in other words these branches going to stagnate in the current market segment? Is the total market already addressed? Does the industry in that case know this? Is the pellets industry ready to evaluate the stricken path considering the technique offered, distribution and market adaptation? In that case we're back at the user – and have to start there.

The industry together with the regional partners plan to create a mutual vision for pellets and solar heating and powerful measures should initiate in the following issues:

1. Customer surveys to establish the customers need considering heating system. What are the core values for pellets and solar heating? What segment of the market should be invested in?
2. From the customer survey work on design and communication, where the actors are manufacturers of equipment, pellets producers and retailers/installers.
3. Secure and functional pellets stores – perhaps in combination with solar collectors?
4. Business development in the whole system chain – with focus on the installer/retailer to create an effective a safe sale and distribution chain for pellets and solar heating.

Cooperation will be continues with established contacts in order to create new projects and improve the market for both pellets and solar heating

### **Partners and Steering Committee for the Regional Programme**

- **KanEnergi Sweden AB**, consultants and co-ordinator of the project
- **ÄFAB**, research in the field of combustion technologies and responsible for training
- **EnergiRåd Väst**, local energy agency and responsible for Energy Train
- **Chalmers University of Technology**, co-ordinator of research network
- **Pellsam**, branch organisation (equipment, installers)
- **PIR**, branch organisation pellets manufacturing industry
- **Swedish Research and Testing Institute (SP)**, research institution and responsible for the regional solar energy programme
- **SEAS**, Swedish solar energy association
- **Västra Götalandsregionen**, the regional government and financiers
- **Swedish Energy Agency**, financiers

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KanEnergi

Sweden