

Comfortable use of wood pellets in one-family houses in Jämtland County

Jämtland County Energy Agency, Sweden

Summary

Energikontoret has, in co-operation with the Swedish Energy Agency, carried through the project "Comfortable use of wood pellets in one-family houses" in Jämtland County from June 2001 until May 2002. The goal for the project was to make it easier for owners of one-family houses to start using wood pellets and an increase of the use of wood pellets in one-family houses. In our regional action plan we stated two goals, one quantitative and one for know-how. The quantitative goal was that the number of one-family houses in Jämtland County, heated by wood pellets, should increase with 50 during the project. The know-how goal was that owners of one-family houses only would need to make one telephone call when wanting to start using wood pellets. In May 2002 the project was evaluated. The evaluation showed that the quantitative goal had been reached. The number of one-family houses in Jämtland County, heated by wood pellets, has increased with about 95. The evaluation also showed that the know-how about pellets among firms and the public has increased due to the information and educational events arranged. Approximately 50 have replaced burning oil and/or electricity with wood pellets. If so, it means that the heating costs for these house owners have decreased with totally about 500.000 SEK per year. Further on the emissions of green house gases will decrease with about 500 ton per year. Finally an increased use of wood pellets leads to increased employment in Jämtland County.

Key-words: Green house gases, wood pellets, know-how

| End-user area | Target Audience | Technical |
|---|---|---|
| <input type="checkbox"/> New buildings | <input type="checkbox"/> Citizens | <input type="checkbox"/> Energy efficiency |
| <input type="checkbox"/> Refurbishment of buildings | <input checked="" type="checkbox"/> Households | <input checked="" type="checkbox"/> Heating |
| <input type="checkbox"/> Transport and mobility | <input checked="" type="checkbox"/> Property owners | <input type="checkbox"/> Cooling |
| <input type="checkbox"/> Financial instruments | <input type="checkbox"/> Schools and universities | <input type="checkbox"/> Appliances |
| <input type="checkbox"/> Industry | <input type="checkbox"/> Decision makers | <input type="checkbox"/> Lighting |
| <input type="checkbox"/> Legal initiatives (municipal regulations, directives, etc) | <input type="checkbox"/> Local and regional authorities | <input type="checkbox"/> CHP |
| <input type="checkbox"/> Planning issues | <input type="checkbox"/> Transport companies | <input type="checkbox"/> District Heating |
| <input type="checkbox"/> Sustainable communities | <input type="checkbox"/> Utilities | <input type="checkbox"/> Solar energy |
| <input checked="" type="checkbox"/> User behaviour | <input type="checkbox"/> ESCOs | <input checked="" type="checkbox"/> Biomass |
| <input type="checkbox"/> Education | <input type="checkbox"/> Architects and engineers | <input type="checkbox"/> Wind |
| <input checked="" type="checkbox"/> Other | <input type="checkbox"/> Financial institutions | <input type="checkbox"/> Geothermal |
| | <input type="checkbox"/> Other | <input type="checkbox"/> Hydro power |
| | | <input type="checkbox"/> Other |

Context

The national and international background for the project was the work which aims to reduce the emissions of green house gases. Combustion of wood pellets does not affect the amount of green house gases in the atmosphere. The local background for the project was the lack of know-how about, and resistance against marketing pellet burners, among traditional plumbing firms. The common house-owner, with his/her questions, could make 20 telephone calls getting no information.

Objectives

The goals for the project have been to make it easier for owners of one-family houses to start using wood pellets and that the use of wood pellets in one-family houses shall increase. In our regional action plan we stated two goals, one quantitative and one for know-how. The quantitative goal was that the number of one-family houses in Jämtland County, heated by wood pellets, should increase with 50 during the project. The know-how goal was that owners of one-family houses only would need to make one telephone call when wanting to start using wood pellets.

Process

The biggest event during the project was to arrange 16 so called "pellets evenings" for the public in Jämtland County. We also arranged about four specific events for firms at the pellets market. The aim with all of these about 20 information and educational events was to increase the know-how about, and the interest for, pellets and pellets combustion among firms and the public. We also wanted to increase the co-operation between firms at the pellets market. The pellets evenings lead to an intensive work of planning, marketing, realising, evaluation and reporting. Totally 640 persons participated at the evenings, that was twice as much as the number we had hoped for.

Financial resources and partners

The project was carried through by the energy agency in co-operation with the Swedish Energy Agency.

Results

In May 2002 we have evaluated the project. The evaluation shows that our quantitative goal has been reached. The number of one-family houses in Jämtland County, heated by wood pellets, has increased with about 95. The evaluation also shows that the know-how about pellets among firms and the public has increased due the information and educational events we have arranged. In turn it has become far easier for owners of one-family houses to start using wood pellets.

The average need of energy for heating of a one-family house is about 25 MWh per year. The number of one-family houses in Jämtland County, heated by wood pellets, has increased with about 95 as a result of the project. Approximately 50 have replaced burning oil and/or electricity with wood pellets. If so, it means that the heating costs for these house owners have decreased with totally about 500.000 SEK per year. Further on the emissions of green house gases will decrease with about 500 ton per year. Finally an increased use of wood pellets leads to increased employment in Jämtland County.

Lessons learned and repeatability

Our opinion is that the pellets market not yet is ready to stand on its own. There is still a need for promotion of the pellets market, including bigger houses such as blocks, schools and commercial

buildings. An increased use of wood pellets in bigger houses should also lead to a more rational distribution system for wood pellets to one-family houses.

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