

## How state aid can be used to support energy efficiency in SME

The County Administrative Board in Dalarna County has the government's responsibility to manage regional funds intended for grants to small and medium-sized enterprises. The County Administrative Board has been responsible for this activity for several decades and has thus built up a major competence in the field. Dalarna is at the same time a Pilot region for green growth and works actively to find new ways to achieve energy and climate goals in all sectors. There is a will to use regional aid programs to support as a tool for the transition in to a low carbon economy.

The EU and government's purpose of funding is to promote sustainable growth and increased competitiveness in SMEs. Aid may be granted in accordance with EU Commission Regulation No 651/2014 or 1407/2013.

For aid there is a number of basic conditions that must be met in order to be granted, among other date of application, the need for funding, a sound economy and the competitive situation on the market. The aid may be granted to investments that achieve lasting employment etc.

### Categories of aid

The two most common categories of aid to investment (in Sweden) are:

#### Investment aid to SMEs; - de minimis aid

Aid may be granted for investments in buildings or facilities intended for permanent use, machinery or other equipment.

Support can also go to product development and as business development checks.

#### Investment aid to SMEs

Aid may be granted for new investments in tangible assets and intangible assets, for example:

- Investments in fixed assets that do not replace existing ones, eg for increased capacity. It may be to build a factory or buy new production equipment.
- When a company starts a production that changes the existing business's products or production processes.

Support cannot, however, go to reinvestments, as they are considered as operating costs that are not eligible. For example, companies cannot be granted aid to replace a machine that has become too old. However, if a new investment, to some extent, replaces existing equipment but still creates significantly increased capacity, part of the investment can still be considered as a new investment.

### Investment aid for energy efficiency measures

During this program period, a new contribution form has been introduced to support investment in more energy measures.

The eligible costs shall be the extra investment costs necessary to achieve the higher level of energy efficiency. The eligible costs can be calculated in two ways:

- (a) where the costs of investing in energy efficiency can be identified in the total investment cost as a separate investment, this energy efficiency-related cost shall constitute the eligible costs;
- (b) in all other cases, the costs of investing in energy efficiency are identified by reference to a similar, less energy efficient investment that would have been credibly carried out without the aid. The difference between the costs of both investments identifies the energy efficiency-related cost and constitutes the eligible costs.

### Need of investments in energy efficiency

In addition to the need to invest in the development of new products and services that lead to increased energy efficiency, all businesses themselves need to review their own production to streamline energy use. The needs for this can be sorted as follows.

#### Investments in more efficient own production

From an energy perspective, you can separate energy usage for support processes and production processes. For manufacturing industries, support processes are standardized so that energy use is always divided into local

heating, local cooling, ventilation, lighting and compressed air as well as pumping, hot water, administration and internal transport. The last four are not so common in terms of investment aid. Production processes can be divided into many different types, such as milling, casting, surface treatment. Some of the support processes are linked to the premises and some are linked to the specific production carried out in the premises. This matter when it comes to supporting companies that rent their facilities. Based on an energy perspective, investments can be divided into the following categories:

**1 Efficiency in support processes linked to buildings, such as**

- General ventilation
- General lighting
- Building heating, building cooling including windows, gates, roofs (envelope)

**2 Efficiency in support processes, not linked to the building, such as**

- Compressed air
- Ventilation additional to general ventilation
- Operational lighting in addition to general lighting
- Internal transports

**3 Efficiency in production processes, such as**

- More efficient machines
- More efficient processes

**4 New premises that are energy efficient, for new production**

**Investments in new technological solutions for the market**

Another equally important area for increased energy efficiency is to support the development of new products and services that provide more efficient energy use by customers when they reach the market. Investments may include, for example, consultancy support for business and product development or investments in machinery and premises for new production.

## Implementing regulations for energy efficiency investments

The County Administrative Board of Dalarna has interpreted the existing regulations in a way that facilitates contributions to investments in energy measures. The following is a list of our implementation of the rules on what type of investments that may be granted.

### Investment aid to SMEs Investment aid to SMEs; - de minimis aid

#### Investments in more efficient own production

##### **1 Efficiency in support processes linked to buildings**

- Can be supported only if the company owns the premises or has a long leasing contract
- Can only be given for new investments, ie if there have been no ports, general ventilation or lighting previously.

Investments should enable increased production in the premises through more effective, more modern premises with a better indoor environment  
Investment in conversion of heating system is not granted, for example from oil to heat pump, as it does not improve the production sites.

##### **2 Efficiency in support processes, not linked to the building**

- Can be granted even if the company does not own the premises, as this belongs to the production
- Can only be given for new investment (not reinvestments) or expansion in, for example, the amount of compressed air, operational ventilation or internal transport vehicles

Investments should enable increased production in the premises

##### **3 Efficiency in production processes**

- Can be granted even if the company does not own the premises
- Can only be given for new investments in machines and processes, or increased capacity, such as a new, higher-capacity machine.

Investments should enable increased production.

##### **4 New premises that are energy efficient, for new production**

- Can only be granted if the company own the premises

Investments should enable new or increased production in the new premises.

## Investments in new technological solutions for the market

### **1 Competence**

- Can grant aid for consultancy

### **2 New production equipment**

- Can grant aid for buildings, machinery and other facilities.

## Investment aid for energy efficiency measures

### Investments in more efficient own production

#### **1 Efficiency in support processes linked to buildings**

- Applies to investments in ventilation, lighting and building envelope that are made primarily for the reason of increased energy efficiency.
- Can be supported only if the company owns the premises or has a long leasing contract
- Can also be given for reinvestments.

Investments should enable increased production in the premises through more effective, more modern premises with a better indoor environment  
Investment in conversion of heating system is not granted, for example from oil to heat pump, as it does not increase energy efficiency.

#### **2 Efficiency in support processes, not linked to the building**

- Applies to investments in compressed air, operational ventilation and internal transport, primarily for the reason of increased energy efficiency.
- Can be granted even if the company does not own the premises, as this belongs to the production
- Can also be given for reinvestments.

Investments should enable production or increased production\*

#### **3 Efficiency in production processes**

- Applies to investments in machines and processes primarily for the reason of increased energy efficiency.
  - Can be granted even if the company does not own the premises
- Investments should enable production or increased production\*

#### **4 New premises that are energy efficient, for new production**

- Can be granted only if the company own the premises
- Investments should enable production or increased production\*

*\* Is not a requirement under the regulation, but is motivated with the will that aid to SME should be prioritized to companies that want and can grow*

### **Evaluation of energy savings and energy efficiency**

In order to assess which investments are the most effective, it is advisable to calculate the amount of energy benefits that a grant will provide.

The County Administrative Board in Dalarna County has chosen to calculate and compare the investment's impact on energy savings and energy efficiency. The definition of energy saving is when less energy is used to do the same. The definition of energy efficiency is when a smaller amount of energy is used per unit produced, which may mean increased use of energy due to increased production. To calculate energy efficiency, the following formula has been used:

$(E_{\text{before}} - E_{\text{after}}) + (1,35 * E_{\text{after}} - E_{\text{after}})$  In this case the investment leads to 35 % increased productivity:

As a follow-up to granted aid, the County Administrative Board of Dalarna County has chosen to use key figures per saved or efficient kilowatt hour. It also enables comparison between different investments and comparison of how effective it is to grant grants to different types of investments.