

Government Strategy to Promote Cleantech Business in Finland



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1. The Government's cleantech strategy

The goal of the government's cleantech strategy is to accelerate growth in Finnish cleantech business and to renew the traditional industry through innovations in clean technology. The vision is that in 2020 Finland will be a global superpower in the cleantech business. Achieving the vision requires maintaining cooperation between administrations.



The cleantech business based on energy and environmental technology is one of the focal areas of Finland's business policy. Cleantech refers to products, services and processes

which promote the sustainable use of natural resources while reducing emissions. While bringing solutions to global environmental challenges, such as environmental degradation, climate change, and the scarcity of resources, cleantech improves the competitiveness of industry and services through the efficient use of materials and energy. The size of the global cleantech market was about EUR 1600 billion in 2012, and the market is growing at an annual average rate of about 7–8%.

Finland is already a leading country in cleantech. The combined turnover of Finnish cleantech companies was about EUR 25 billion in 2012, with 15% growth from the previous year (Finpro). The special Finnish strengths in cleantech business activities include resource efficiency in industrial processes – i.e. energy, materials and water efficiency – as well as bioenergy and biobased products.

The strategic cleantech programme of the Government of Prime Minister Jyrki Katainen was launched in 2012. The strategic goal of the programme is for Finland to be known as a global superpower of cleantech in 2020. As a consequence, Finland's national cleantech image would attract foreign investors to our country, Finland's role in international decision-making would grow, and Finland would strengthen its position as a leading country in cleantech RDI activities.

The numerical goals for the strategic cleantech programme by 2020 are:

- to raise cleantech companies' turnover to EUR 50 billion, of which exports account for over 75%
- to double the cleantech home market to about EUR 20 billion,
- to raise the number of cleantech companies from 2000 to about 3000
- to create at least 40,000 jobs in clean technology in Finland.

2. Implementing the Government cleantech strategy

In order to achieve the ambitious goals of the cleantech business activities, the Government requires persevering the cooperation between administrations in 1. the so-called priority actions and 2. the development of the operating environment of cleantech business. The priority actions promote the development, commercialisation and implementation of companies' cleantech innovations. The development of the operational environment for the cleantech business encourages companies to engage in innovative and sustainable business and promotes the market access of the new cleantech solutions.

The priority actions required by the Government are presented in chapter 3 of the cleantech strategy, and they are:

- making cleantech the spearhead theme of the country brand
- promoting cleantech investments
- creating cleantech demonstration environments and
- establishing the Cleantech Finland Board, which transcends the boundaries of administration.

The development actions required by the Government in the operating environment are presented in chapter 4 of the cleantech strategy, and they are:

- taking the promotion of the cleantech business into account in international influencing activities
- clarifying and speeding up the slow and complicated licensing processes
- developing regulation to support cleantech innovations and their implementation
- ecuring the foundation of skills and knowledge through research and education.



3. Priority actions required to realize the goals of the Government

3.1 Cleantech as a key theme of the country brand

The unified message about Finland being a forerunner in cleantech needs to be strengthened in international forums and in export promotion activities. As part of the Team Finland network, cleantech needs to become the top priority of international marketing and a central part of the Finnish country brand. The marketing is done in collaboration with ministries, embassies and stakeholders. This requires uniform marketing material, training of key players as well as versatile international visibility in the media and in cleantech events. Turning cleantech into a key theme of the country brand promotes the internationalisation efforts of all Finnish cleantech companies while enhancing Finland's attractiveness as an investment target.



A communications plan for Finland's cleantech marketing is to be drafted as a Team Finland collaborative effort (Finland Promotion Board). Cleantech is included as a topic to be dealt with in all high-level international meetings and materials. In addition, core messages and marketing material, which support the cleantech country brand, are to be drafted. An allocation is to be made in the state budget for financing.

In 2014 all domestic organisations operating in internationalisation are to be trained to understand and to communicate to their interest groups the basic information about Finnish cleantech know-how and international goals. The training is to be implemented as part of the activities of the Team Finland network and its implementation is primarily the task of the Ministry of Employment and the Economy (MEE) and the Ministry for Foreign Affairs. The cleantech skills of the Team Finland organisations (incl. the Centres for Economic Development, Transport and the Environment) working in Finland are to be strengthened. In this way improvements are made in customer service in the cleantech field while ensuring that local Team Finland client teams have the capability to communicate cleantech matters under a shared communications plan. The Ministry of Employment and the Economy is responsible for the training of the actors. In addition, a cleantech coordinator is to be named to each foreign-based Team Finland team. Efforts are also to be made to ensure that the teams include sufficient expertise on cleantech questions. The training of the foreign network is financed through funding from the Ministry of Employment and the Economy and the Ministry for Foreign Affairs. The training is implemented primarily as civil servants' work.



Coordinated by the Ministry of Employment and the Economy, and as part of the work of the Team Finland network, the first cleantech summit is to be organised in Finland: The Global Cleantech Summit 2015. The summit is to be by invitation only. Invited guests are to include the heads of state of various countries, ministers responsible for cleantech issues, corporate directors and the heads of important research institutes, as well as other stakeholders. The aim is to profile Finland as a country that takes the initiative in the development of global cleantech solutions. An allocation is to be made in the state budget for financing.



The Ministry for Foreign Affairs is to name shared cleantech envoys of the Team Finland network to more than 100 countries by 2015. The goal is to find, for instance, corporate directors or other experts who would act as the faces for Finland's cleantech knowhow in the countries in question. This would be done through, for example, the media and by participating as a speaker in important cleantech events. An allocation is to be made in the state budget for financing.



The Ministry of Employment and the Economy are to launch World Cleantech Prize worth EUR 1 million to be granted to the winner of an international business plan competition. The prize may be implemented by emphasising the cleantech theme in the Millennium Prize, for instance.



3.2 Advancing investments for cleantech

New cleantech solutions face challenges in entering the market. Finland's domestic market is relatively small, and several cleantech companies operate in investmentintensive fields. R & D and pilot projects of cleantech companies can be financed through sources such as the financial instruments of Tekes. Reaching the markets after the R & D and pilot stage projects is nevertheless challenging under the present financial conditions. In this situation the public sector can operate as a central engine in improving possibilities for commercialisation by securing financing. Financial instruments shall form an uninterrupted continuity from RDI to internationalisation. The measures are aimed at attracting annual reference investments into Finland worth EUR 150 million. The financial instruments to be developed are to be applied broadly to cleantech demonstration and reference projects. The projects would be related to material efficiency, waste management, water treatment and especially the reduction of emissions into the Baltic Sea through the introduction of wastewater processing technologies. References for technologies with export potential are to be created.



The Ministry of Finance, the Ministry of Employment and the Economy and the Ministry of the Environment are to evaluate and carry out the redirection of the sustaining corporate subsidies and subsidies that are environmentally harmful. These are retargeted for the introduction of renewing cleantech solutions like the creation of demonstration environments. In addition, all subsidies linked with investments granted by the ministries need to take the promotion of cleantech solutions into consideration.



The Ministry of Employment and the Economy and the Ministry of Finance are to annually provide EUR 30 million in investment subsidies for cleantech demonstration and reference projects, which are to catalyse EUR 150 million in investments into Finland. This can be applied broadly to the cleantech demonstration and reference projects. Financing is collected by redirecting the conserving corporate supports, by directing the present funding of the organisations in the MEE Group and from the regional European Regional Development Fund programmes. The possibilities of using the State Pension Fund are to be examined.



3.3 Cleantech demonstration environments

From the point of view of companies in the finnish cleantech business, the most interesting target markets are located in North America, Russia, India, Brazil and China. The attractiveness of the target market varies according to the business area. However, China alone is to spend more than EUR 200 billion on the reduction of emissions in the next five years.

An extensive cleantech demonstration and pilot environment is to be set up as an international showcase to promote the internationalisation efforts of companies. The demonstration environment is to offer companies points of reference and a product development environment as well as a possibility for more efficient collaboration with other companies and research institutions, and for new innovations arising thereof. The target is to have at least 50 domestic cleantech companies to participate in the construction of the reference environments. Instead of several small demonstration environments, the resources are to be concentrated first on the creation of one ambitious international showcase in the Helsinki region. In addition, the possibility of building a demonstration environment in China, or another target country, is to be examined. In the target market, Finnish companies could present their products and knowhow, and the country would also operate as a second domestic market for Finnish cleantech solutions.



The Ministry of Employment and the Economy and the Ministry of the Environment are to concentrate their resources on the creation of a demonstration environment in the Helsinki region, or elsewhere in Finland, as a public-private partnership project. The financial instruments of the MEE, Tekes and possibly other ministries are to be utilised in the financing.



With the new Team Finland operation model and under the leadership of the Foreign Ministry and the Ministry of Employment and the Economy, cleantech companies' internationalisation and business are accelerated. This is to be piloted in China. In addition, demand-driven demonstration projects in renewable energy and energy efficiency are to be implemented in China. Financial instruments of the MEE and the Foreign Ministry are to be utilised in the financing.



The Foreign Ministry and the Ministry of Employment and the Economy are to create smaller thematic pilot environments which promote sustainable development in the development business in international target countries by utilising development policy instruments, among others. Financing instruments of the MEE and the Foreign Ministry are to be utilised in the financing.



The Ministry of Employment and the Economy and the Ministry of the Environment create smaller thematic pilot environments for Finland, utilising, for example, the Innovative Cities programme (INKA) and the Carbon Neutral Municipalities project (HINKU) and the green economy operating model. Financial instruments of the MEE, Tekes, and ME are to be utilised in the financing.



3.4 Launching Cleantech Finland Board

The government can best promote the cleantech business by combining the cleantech business policy with other policy sectors. Key policy sectors include innovation, energy, climate, environment, foreign, transport, construction, and housing. In the development measures it is necessary to take strongly into consideration the needs of the business world, the goals of the business structure renewal, the sustainable use of natural resources, and emissions reduction.

The Government, headed by the Prime Minister, needs to take the initiative in linking cleantech with the activities of different policy sectors. The responsibility for the preparatory work lies within the Ministry of Employment and the Economy. The Board should include the ministers responsible for the key policy sectors, corporate executive directors and the directors of the most important state organisations. The collaborative body is to operate as an organ that develops the holistic management of the business policy promoting cleantech. This work is to be guided by targets set annually by the Government. A credible body that extensively covers the public and private sectors also reinforces the international image of Finland as a cleantech forerunner and gives an effective marketing advantage for cleantech companies internationally.



In 2014 the Prime Minister's Office is to launch "Cleantech Finland Board", headed by the Prime Minister, with the tasks of directing the implementation of the Government's cleantech strategy as well as setting the annual goals and the action programme. The preparatory work is to be done as Government civil servant work.

4. Actions to develop the operating environment of cleantech business

Reaching the cleantech business growth targets requires lobbying in international forums, a supportive domestic operational environment and a functioning domestic market.

Finland is to prioritize the promotion of its cleantech business activities in all international influencing activities, especially in the European Commission and international funding organisations. In addition, the existing action programmes and financial instruments, such as the development policy funding, need to be utilised to promote cleantech business, because cleantech solutions can combine commercial benefits, social development impacts and the improvement of the state of the environment.

The obstacles need to be removed that are slowing down the progress of the entry to market of new innovative solutions. This applies especially to the streamlining of licensing processes. The regulations linked with cleantech need to encourage both the companies to develop advanced solutions that are better for the environment and the public and private sector customers to take these solutions more widely into use. Finland is already one of the world's leading cleantech RDI countries, but the knowledge base and the attractiveness of cleantech is to be further strengthened through the development of research and education as collaboration between companies and universities.



Coordinated by the Prime Minister's Office, the promotion of cleantech is to be taken into consideration in all international lobbying activities. Finland needs to display the cleantech business opportunities and the actions accelerating cleantech in all of its international influencing activities. It is especially important to influence the European Commission's policy making and the EU's funding programmes, in which Finland seeks to profile itself as an actuator in renewing industrial policy through cleantech, as a forerunner in cleantech business and as a coordinator of development projects. This is done according to the action programme of the Ministry of Employment and the Economy and the Prime Minister's Office. Specific goals are to be drafted as a collaboration of the responsible ministry and the cleantech strategic programme with the aim of influencing both other key international organizations affecting the cleantech business, such as OECD, UNEP, WB, EBRD, EIB and NMC, NEFCO, and the international environmental agreements crucial from the point of view of cleantech. Preparative work is to be done as part of Government civil servant work.



Licensing procedures of cleantech projects are to be streamlined as part of the general streamlining of procedures. The target is to considerably accelerate and reduce the number of the licensing procedures needed for investment decisions. To achieve this, the Ministry of the Environment and the Ministry of Employment and the Economy are to work together.

Different ministries are to promote innovations in cleantech by developing legislation supporting the creation and rapid access to the market of sustainable cleantech innovations with export potential. The areas of development of special importance are the regulations linked with policies for energy and climate, environment, transport, housing and agriculture as well as EU/OECD collaboration in areas such as export subsidies. Preparatory work is to be done as part of Government civil servant work.



The knowledge base for the future is to be strengthened under the leadership of the Ministry of Education and Culture by developing cleantech education and research as well as by encouraging the establishment of a globally leading network of institutions in Finland. The networking institutions are to focus the education and research according to their own expertise areas and utilise synergies with other universities and research institutes.

5. Follow-up of the implementation of the Government's cleantech strategy

Each administration is to take into consideration the goals and actions of the cleantech strategy according to the penetration principle.

The actions of the cleantech strategy are to be implemented within the budget appropriations approved by the Government and the appropriations granted by the Parliament.

The Cleantech Finland Board, led by the Prime Minister, is to regularly evaluate the implementation of the cleantech strategy. When needed, the Prime Minister's office is to issue recommendations for enhancing the implementation of the decision in connection with the evaluations.



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