

## CASE 8: SITRA ENVIRONMENTAL PROGRAMME, FINLAND

### BASIC DETAILS

**Name of initiative**

SITRA Environmental Programme

**Type of initiative**

Environmental Programme 2005-2007

**Country/Region**

Finland

### PART 1: BACKGROUND INFORMATION

**Actors involved in the delivery of this initiative**

Sitra (the Finnish National Fund for Research and Development) is responsible for the programme. Sitra is an independent public foundation under the supervision of the Finnish Parliament. Sitra was set up in conjunction with the Bank of Finland in 1967 in honour of the 50th anniversary of Finnish independence.

Sitra's operations are funded with endowment capital and returns from capital investments.

**Target audience**

Clusters including SMEs, especially those SMEs within the environmental technology sector.

**Objectives**

The aim of the Environmental Programme is to assess the best possible clusters, involving the most innovative SMEs working within environmental technology. These clusters would consist of SMEs, universities, organisations and/or businesses that could benefit from the development/use of environmental technology. In general SMEs working within the environmental field are so small that they need to form networks with other SMEs. The programme will not only try to enable this but to also involve universities and other organisations to participate in these networks. There are a large number of small enterprises in the environmental sector and only a few large leading-edge enterprises and even fewer medium-sized businesses that could function as a unifying force in the sector. The challenge lies in strengthening the SME-industry and creating a path for the growth in domestic and international markets. The programme will also map the location of high environmental know-how in Finland.

The Environmental Programme would then provide support mechanisms and funding for prototypes. When innovative SMEs develop their ideas they have to demonstrate to interested parties that the innovative idea works in practice. The existence of a working prototype will increase the confidence of those who are interested in the product.

The programme aims to bring the environmental sector into the forefront. It also aims to provide the historical evidence to support the foresight of a worthwhile investment

opportunity. The growth of the environmental sector is already happening naturally but the support by the programme will give the environmental sector an extra push and speed up this growth, enabling the Finnish SMEs to use these skills as a marketing opportunity internationally.

### **Description**

The programme starts from the general industry development frame, studies and experimental projects, and focuses on selected technology areas. These are:

- Clean and energy-efficient technologies. The focus area includes innovative technologies for renewable energy and technologies that mitigate the climate change.
- Water, wastewater and waste management. Special focuses in solving sludge problems, treatment of organic waste and production of bio-gas. Other areas are re-cycling and especially closing of industrial cycles – re-use of industrial waste.
- Environmental monitoring and measurement. Measurement systems and networks, sensor technology and information technology solutions

The Environmental Programme is divided into an “industry profile”, “growth and internationalisation of export” and “home market development”.

The “industry profile” has the following objectives:

- Bringing clean-tech SMEs forth (network/cluster analysis)
- Follow-up of market development ((statistical systems development, market follow-up)
- Challenges of the future (foresight and R & D analysis)
- Venture capital investments (investment analysis and follow-up system)

The “growth and internationalisation of export” has the following objectives:

- Company networks (regional co-operation and use of network models)
- Target market studies (company driven pilot projects for selected markets)
- Financing (financing models, subsidies and funds)

The “home market development” has the following objectives:

- Top-ranking competences (industry analyses)
- Innovative entrepreneurship – new markets and businesses (industrial residuals, material efficiency, green public procurement)
- Integration (regional and international co-operation)

The support is for the period 2005-2007 but there are plans to create a fund (state or private) to enable the initiative to be funded in the future.

### **Main intended benefits for SMEs**

Increased business opportunities combined with the aim of creating an environmental investment portfolio to take to international markets. In addition, the environmental programme will create new networking opportunities for SMEs.

### **Principal influences that led to the development of this initiative**

It became evident that many SMEs were innovative but hampered by the lack of resources. Investments into the environmental sector were also seen as an area with promising growth potential.

### **Who was involved in the development of the initiative?**

Sitra

### **Main outputs**

The main output is to achieve the goals of the environmental programme (development of SME clusters, environmental market opportunities etc.). Seminars and websites are stepping stones on the route towards the main objectives of the environmental programme. During the first year 2005-2006, the programme has carried out development studies and organised different networking experiments with companies. The main activity of the programme in 2006 is the National Action Programme which will put together studies, evaluations and experiences for a strategy and action plan. Sitra will start the implementation of the plan, but the intention is to outsource the activities in 2007 to the private and public players in this field.

### **Similar initiatives**

Nothing similar exists in Finland. In Sweden there is a programme called (Sventech). There are also plans to develop the “environmental programme” idea within the Nordic Innovation Centre<sup>1</sup>.

## **PART 2: COMMUNICATION**

### **How SMEs are made aware of the opportunities under this initiative**

SMEs are made aware of the programme through media, workshops and seminars. The programme in itself is based on a well developed marketing strategy.

### **What has worked well/less well**

The programme has been well received, both among the authorities as well as among SMEs. Sitra has received much feedback from SMEs reflecting a genuine need for this type of support. The only problem so far is the size of the task. The programme has required more work than anticipated and is stretching the human resources of Sitra.

### **Proportion of the target audience is engaged in the initiative**

Difficult to estimate.

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<sup>1</sup> The Nordic Innovation Centre is the Nordic Council of Ministers’ instrument for promoting an innovative and knowledge-intensive Nordic business sector.

## **PART 3: BUDGET**

### **Total budget**

€12-15 million

### **Actual expenditure per annum**

€ million

### **Start up costs**

The programme was developed during 2004 and the beginning of 2005. The staff costs were the greatest and estimated as two man years.

### **Ongoing costs**

The operational costs are €1.6 million per year. This covers salaries, travel and consultation fees.

### **Source of funding**

Sitra - their operations are funded with endowment capital and returns from capital investments.

### **SME contributions**

SMEs have to contribute their own costs, but do not pay for education/marketing etc.

### **If externally funded, could this initiative be sustained if funding were to be removed?**

The aim is to receive funding from other sources as well. Project partners, such as TEKES (Finnish Funding Agency for Technology and Innovation) and VTT Technical Research Centre of Finland, will also fund the programme. Funding from industry exists but the amounts are quite marginal. The SMEs involved in the programme are required to pay their own costs (travel etc.).

### **Steps taken to secure long-term finance**

The programme is time specific. The challenge is to enable funding from other sources after this. The establishment of a private or state fund to secure future funding is currently under investigation.

### **Cost effectiveness**

An evaluation consultant has been employed. His/her first evaluation of the programme is due in autumn 2006.

## **PART 4: EVALUATING EFFECTIVENESS**

### **A- Performance:**

#### **Delivering improved compliance with environmental legislation and/or improved environmental performance**

It is anticipated that the programme will improve environmental performance but it is still too early to assess whether this is the case in practice.

#### **Outcomes, ie changes in behaviour**

The previously very fragmented network is being pulled together and some of the ideas have started a life of their own. FinPro (a consultancy focused on accelerating the internationalization of Finnish companies) has developed some new project ideas as a consequence of being involved in the environmental programme.

### **Impacts, ie physical changes in the environment**

Too early to say.

### **Main strengths**

The main strength of the initiative is the future looking approach in promoting SMEs in the environmental sector as a lucrative business opportunity. The programme will help SMEs to create clusters with other SMEs to overcome the lack of resources. These clusters are based on a mapping exercise, identifying the most innovative SMEs, which form the base for the networks with other organisations, such as TEKES (Finnish Funding Agency for Technology and Innovation) and VTT Technical Research Centre of Finland.

### **Characteristics contributing to these strengths:**

#### ***a. Communication***

Creation of networking clusters is one of the main aims of the programme. Hence communication is essential.

#### ***b. Delivery***

Sitra is well respected in the business world and it has not been difficult to disseminate the initiatives to SMEs. As the programme is still very young there is not sufficient data to address the delivery aspect in more detail.

#### ***c. Management***

Difficult to comment on management as the programme has just started.

#### ***d. Funding***

Sitra's high independence and own funding has created a well working structure for the initiative to develop.

### **External factors which may have contributed to its success**

None identified

### **Main weaknesses**

The project required more staff time than had been anticipated.

### **How could these weaknesses be addressed?**

Sitra has already outsourced some of the work.

### **Attempts made to improve the initiative**

The creation of a future state/private fund to secure future funding.

### **Evidence of sustained changes in performance**

Too early to say.

## **B – Opinions:**

### **Deliverer's opinion**

The programme has so far worked very well.

### **Users' opinion**

Based on the great amount of applications from SMEs, the initiative is well perceived.

### **Other stakeholder views**

Very positive.

## **PART 5: TRANSFERABILITY**

### **Could this initiative be easily transferred to other Member States/regions?**

The approach relies to some extent on an existing high standard of environmental know-how among some SMEs as well as a traditionally well developed co-operation between industry and universities. Even if the programme itself is transferable, its development might be hampered if these aspects are not as well developed in the country trying to implement this initiative.

### **If not, what are the barriers, and could these barriers be overcome?**

The above mentioned barriers are difficult to overcome and therefore the initiative needs to be developed with these in mind.

### **Has this initiative already been replicated elsewhere?**

No

### **Has this initiative itself been transferred from somewhere else?**

No

### **If this initiative were to be replicated, what key lessons would you share?**

Too early to identify any key lessons.

## **PART 6: CONCLUSIONS**

The programme combines co-operation, the formation of clusters and improved environmental performance in an appealing package. Clusters between academia and business are traditionally well developed in Finland. However, this is the first time when the formation of clusters is optimised as part of an environmental initiative. The programme will help SMEs to create clusters with other SMEs to overcome the lack of resources. These clusters are based on a mapping exercise, identifying the most innovative SMEs, which form the base for the networks with other organisations, such as TEKES (Finnish Funding Agency for Technology and Innovation) and VTT Technical Research Centre of Finland. It also aims to provide the historical evidence to support the foresight of a worthwhile investment opportunity.

The growth of the environmental sector is already happening naturally but the support by the programme will give the environmental sector an extra push and speed up this

growth, enabling the Finnish SMEs to use their skills within this sector as a marketing opportunity internationally. The compliance with environmental requirements is therefore only secondary, with the main focus being the promotion of SMEs in the environmental sector as a lucrative investment opportunity.

**Sources of information/people interviewed.**

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