

Workforce Training Program (2014-17)



Partnership in Education for Eco Design

Innovation in Skills Development in SMEs provides new ways of talent development for small and medium sized enterprises. While SMEs are crucial for economic development, employment and job creation they face continuing barriers to developing human capital.

Training & skills development is significantly lower in SMEs than in large enterprises - with SMEs involved in up to 50% less training than larger firms. **The pool of SME workers requiring further education in technology is significant.** However, SMEs often find difficult to support formal learning activities due to their small size.

The Virtual Technology Training Platform (VTTP) is a response to the fast growing need on leveraging technology and skills development in SMEs. The VTTP provides FREE training for employees of all size enterprises across industries and regions.

Benefits:

- 24/7 access to web-based training.
- Acquired skills can lead to savings in energy and resources and better competitiveness.
- Training leads to new markets, variety of new employment opportunities and economic growth.

Factors driving SMEs training activities:

- Market competitiveness.
- Employability.
- Robust firms with local jobs and new business opportunities.

Market forces dominate current and future take-up of opportunities for workforce skills development:

- Firms and employees seek ways of learning to acquire new knowledge and skills they need, particularly for innovation and entrepreneurial processes.
- **Companies report need for technology training and skills development activities.**
- The technology skills development is vital especially for both low skilled and highly skilled employees.
- Growth potential SMEs focus on skills of business planning, management and technical skills.
- Market forces are the main drivers for skills development in firms, which will result from in-house demand arising from product development or production needs, as the result of financial adjustments, or from participation in external private sector activities with clients and suppliers.

Skills development is a resource intensive activity for SMEs

Skill development is a resource intensive activity, attention must be paid to demonstrating the benefits for firms participating in training activities - in other words, the returns on their training and skills development investments must be sufficient to offset the costs. Investments in training activities are finite and should focus on areas where the return on investment is highest.



Specific areas of training include:

- Co-ordinating training across local, regional, national, and international level in order to avoid confusion experienced by SMEs in identifying their training needs and assessing the best options for their business.
- Including evidence gathered from training evaluations and/or pilot studies of the benefits of training activities, as part of advice and activities provided to SMEs.
- Encourage investments in technology to the business receiving training.
- Advisory services.

Market Forces

In-house and external market forces are the main drivers for firms' training activities within their supply-chain or industry. Where public policy has an objective of requiring an action from SMEs, firms are likely to act - to make decisions about skills development and training activities within their firms.

Focus on Technology, Business Innovation, and Entrepreneurial skills

The specific needs of skill development vary across local areas and regions, and are strongly influenced by industrial concentrations and existing skill levels. The local context is important when it comes to collaboration between skills development activities in firms and training organizations.

There are some fundamental skills related to Eco Innovation and Commerce - technology and entrepreneurship, which should become foundation skills sets for all firms. Local customization should be encouraged to meet specific local needs.

Specific training include:

- Technology enhancing skills.
- Developing local skills ecosystems - partnerships between technology companies (training providers), local authorities, industry representations, and trade organizations and make

training fit-for-purpose in local communities.

A Community of Practice

The need for regional customization should be supported by a common platform of knowledge of how SMEs use training to develop skills within their workforces and what works, does not work and is best practice activity across different regions. Understanding both variation and best practice is an important task for us, as it will allow us to select a mix of training programs to encourage skills development in their particular circumstances and understand why specific training may encourage skills development in SMEs.

The establishment of a community of practice of regional technology skills and growth for knowledge sharing between organizations and regions will allow for the transmission and interpretation of best practice.

Eco Design

Consumers, sensitive to the environmental quality of goods and services, are responding to Eco products and demanding product-specific information that would allow more informed purchasing decisions. A number of helpful guides to choosing Eco products have been published by consumer and environmental organizations and even by governments, further amplifying the role of consumers in shaping the market for Eco goods.

Many consumer surveys suggest that there is a willingness to pay for products with lower environmental impacts. This consumer-led change is closely associated with policies and programs to introduce Eco-labels or Environmental product declarations and government supported systems of Eco Labeling' and Eco Consumerism.

We focus on improving a product, development of solutions that change not only the product but also the whole product system, including the way the product is produced, used and disposed of. For example, if a product can be improved by ensuring that its constituent materials are collected and re-used/recycled at end-of-life (a common Eco design

outcome) then changes may be needed in the organization of the system through which that product is distributed and sold to consumers. There is a need to be effective and efficient Life Cycle Assessment (LCA), mechanisms for collecting products, and separating their constituent materials, at the end of their first life.

We address the:

Selection of materials for the product - materials that can be recycled; The identification of components that may be able to be refurbished/reused at end of life; Way the product is assembled (so that it can be efficiently disassembled at end of life); Mechanisms for collecting the used product - such as free postage return, collection boxes at retailers, offering trade-in discounts on products returned to the manufacturer, changing from sales to leasing of products etc.; Effective new uses for recycled materials or refurbished components.

A progressive change in the market for consumer goods, moving from price driven to quality driven (valuing reliability and technical functionality), is a feature of the transformation of post-war industrialized economies; a transformation strongly associated with the growth of industrial design. As government attention to the environmental impacts of products, and consumer demand for greener goods, became more obvious, environmental impact became a new dimension of product quality and a new competitive terrain for manufacturers. Experimentation and research in design for the environment, more commonly shortened to 'Eco Design' has grown within companies and design research organizations.

Many governments have invested substantially in industry linked programs to develop Eco Design methodologies and to demonstrate the potential to deliver Eco Innovative products through design. These programs have produced new Eco Design methodologies and the outcomes generated considerable attention from industry and government policy makers.

Learn more