



# Industry Engines 2018



**ARENGUFOND**  
ESTONIAN DEVELOPMENT FUND

**GROWTH OPPORTUNITIES FOR ESTONIAN MANUFACTURING INDUSTRY IN THE NEXT DECADE**

Industry engines are manufacturing companies which create substantial added value and form the internationally competitive spine of the manufacturing industry. In this manner, they steer the growth and development of the economy as a whole. However, Estonian manufacturing industry has to date been focussed on operations and business areas where there is limited potential for increasing competitiveness and added value creation.

The Estonian Development Fund launched the 'Industry Engines 2018' foresight project in spring 2008 with the aim of identifying such kind of a successful spike for Estonia's manufacturing industry.

The starting point of the foresight work has been that in tomorrow's world there will be little point in looking for breakthrough and growth opportunities at the level of economic sectors and industrial branches. Due to globalisation it is what happens within branches of industry that is pivotal and decisive. Thus, the focus should be on what are and could be the roles that Estonia's manufacturing companies play in international value chains.

The resulting growth opportunities that have been identified can be divided into three groups. The engines of Estonian industry will primarily be those companies which are able to combine and adopt them simultaneously.

**There are no sunset industries – only sunset activities.**

MIT Professor Richard Lester  
at Manufacturing Industry Forum  
2 December 2008



## Three types of growth opportunities

Engines of Estonia's industry will be those who combine them

**1.**  
**Boosting value added by moving:**

- towards product development
- towards brand ownership and development
- into higher value chains

**2.**  
**Business areas with the greatest growth potential:**

- environmental and renewable energy products
- health and wellness products

**3.**  
**Export market choices:**

- 'Old Europe' – wealthy, but saturated and marked by sluggish growth
- Eastern Europe and the CIS states – marked by rapid growth
- Big faraway markets – marked by the highest growth

## Growth opportunity 1: moving ahead within or between value chains

The manufacturing industry in Estonia today is mostly focussed on simplistic production operations and functions. Providers of assembly or production services, who basically sell only their production capacity, operate within the least profitable part of value chains. As a result, Estonian companies have been concentrating on cutting costs and boost-

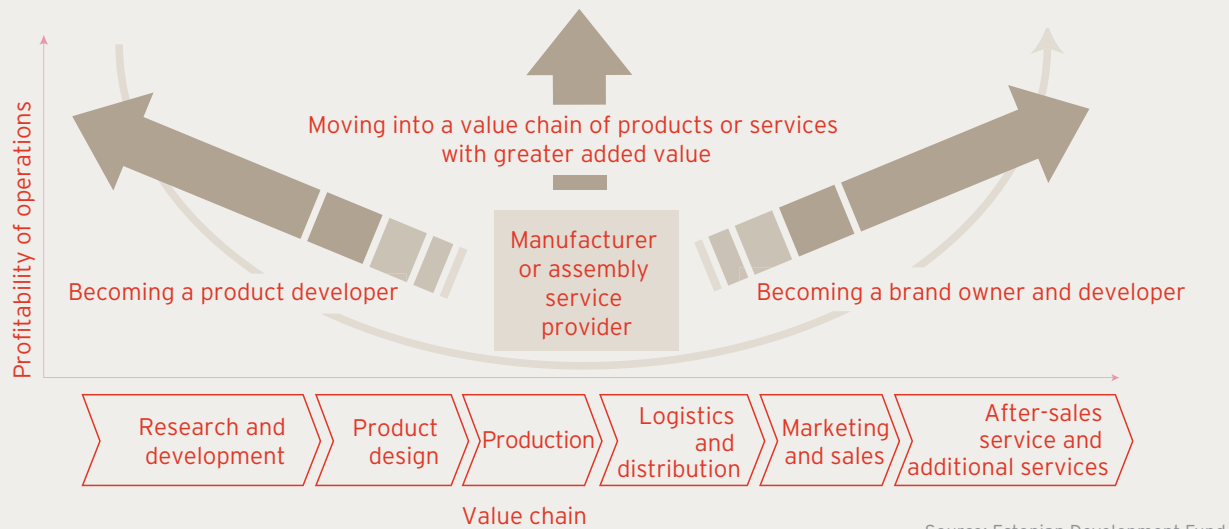
ing efficiency for years, including during the current crisis times. Yet, this is only a temporary solution, because competition based on cost and efficiency advantages is the fiercest one and the one in which the cheaper developing nations will win out sooner or later.

The way out is to move towards more profitable activities in the value chain.

The more successful manufacturing companies of Estonia have done this or are doing so already, but this change is required on a broader scale.

The first opportunity to move ahead in the value chain is to make a move towards product development operations. This allows to start working for clients from an earlier point in the product

## Value added in manufacturing industry can be boosted in several ways



### The fountain of happiness for Estonia's manufacturing companies is not cheap labour.

Almar Proos  
Chairman of the Council, AS Favor  
Manufacturing Company of the Year 2008  
*Äripäev* newspaper, 14 October 2008

preparation process based on the accumulated actual production experience.

The most distant and profitable point along this path is the development and design of own products. However, one can begin by taking smaller steps as well: instead of selling the existing general production capacity can start preparing and producing prototypes, system solutions and 'turn-key' projects or offering production development and testing services. For example, the company E-profiil has been moving away from providing general welding services towards the provision of integrated construction solutions for the oil and gas industries. The former Elcoteq (now Ericsson) added testing services to its electronics equipment assembly worklines on at its Tallinn plant.

This path of boosting value added is today most prevalent for machine-building and metalworking industry, the electrical device and electronics industry as well as transport vehicle production industry. Their minimum target for the future should be to become at least technology partners in international value chains. They could then take on a full responsibility for the development and manufacturing from the initial design phase to final products based on good knowledge of and skills in using certain technology.

The second big option is to move in the opposite direction in value chains - closer to the end client and towards brand ownership and development. The most distant point along this path is establishing and operating own retail trade networks, following the lead of Baltika, for example. The first step could be to boost revenue and added value by doing away with intermediaries, taking on the management of client-focused marketing and distribution networks or distinguishing oneself and specialising in market niches based on brand development. For example, the latter is behind the success of Ilves-Extra, who has created and manages the ISC brand.

In Estonian manufacturing industry of today, this opportunity applies particularly to the clothing and textiles industry, the food and drink industry, the furniture industry and manufacturers of building materials, chemicals and timber products (such as log homes) designed for end consumers. Their future goal should be the

creation of smart brands that are capable of crossing national borders. Mostly these can be niche brands aimed at specific target markets.

The third opportunity is to use the knowledge and experience accumulated so far in order to move towards new, more valuable products and services: switch to a higher value chain.

A new area of use can be found for the current raw materials or products. The transition can be made to a more complex product with a similar underlying or production technology (as in the case of electronic component manufacturer Enics Eesti moving from household electronics into the field of medical electronics). The existing product can be combined with related products (as in the case of UPM Kymmene making timber boards in its Otepää factory which are already fitted with a wind barrier and insulation layers). Or related products can be added to the product portfolio (as in the case of construction foams producer Krimelte having now also become a manufacturer of expanding tapes and exterior tiles).

Moving ahead in this way is the way out if the possibility of boosting revenues through existing products and services is limited otherwise. It is the main largely unused option available today to the wider chemical and plastics industry, the publishing industry, forestry and the timber industry and manufacturers of construction materials in Estonia. At the same time, it is a path that a company from any branch of industry could follow.

## Growth opportunity 2: moving into business areas with the greatest growth potential

The growth potential of current business areas (i.e. the areas of operation) of many of Estonia's manufacturing companies has already been exhausted or soon will be. New opportunities should be sought among business areas with the greater growth potential, for which there are definite markets and market growth.

Analysis of global trends reveals that the greatest certain growth can be expected in areas where different trends of changes in consumption and the needs meet. These are primarily two business areas: environmental and renewable energy products; and health and wellness products.

Environmental and renewable energy products are all such products with which changes to the environment can be avoided or their effects mitigated: machinery and equipment for pollution detection and clean-up operations; energy-efficient construction and other materials; environmental-friendly devices and packaging; and so on. New possibilities are being generated in this business area for every branch of industry, for example even by developing more environmentally

friendly products compared to the existing ones.

Health and wellness products are all such products which extend people's life expectancy and improve their quality of life: functional food and beverages; health-friendly textiles and chemical products; health monitoring and treatment devices; and so on. This area is particularly due to grow as the world's population continues to age, which leads to greatly increasing need for adapting the products for older people.

In addition to the rapid expected growth, the markets in both fields are already today large, albeit in the shaping stage – there are niches which are yet to be filled, and even niches which are yet to be developed. Within these business areas, Estonian manufacturing industry has great cooperation, foreign direct investment and even new sub-contracting opportunities, since our neighbours and biggest economic partners – Finland and Sweden – have set themselves the goal of becoming world leaders in these areas. There are also first business initiatives and experience in Estonia within them, but not beyond lone examples so far.



**We have to set for our manufacturing sector a much more conscious course into the future.**

Juhan Parts  
Minister of Economic Affairs and  
Communications  
at Manufacturing Industry Forum  
2 December 2008

## Growth opportunity 3: exploring new markets and increasing the share in existing ones

Manufacturing industry gives the majority of Estonia's exports, but our companies are operating in too few markets and in small total volumes. We can increase our share in the markets we are already operating in, but greater growth potential lies in moving into new markets.

Our main existing foreign markets in 'Old Europe', including those in Scandinavia, are wealthy, but saturated in terms of competition and they experience slow growth. Maintaining or boosting our share in these markets will be complex and costly, although attractive in the biggest potential new business areas outlined above.

Much greater growth expectations lie elsewhere in Estonia's neighbourhood, in Eastern Europe and the CIS states. There exist a lot of unused opportunities for the Estonian manufacturing industry to enter markets and find growth from the current business models and products, including together with Western European companies searching for a partner who knows the region.

However, the greatest growth potential is in markets which until now have remained distant or unknown to Estonian companies, or too large in terms of demand. Yet, the emerging economies of China, India, Mexico, Brazil, Turkey and others are outstripping the West in terms of market volume and growth prospects. Amongst else, particularly rapid growth is expected there in the areas of renewable energy and environmental products and health and wellness products.



## Let's make environmental and renewable energy as well as health and wellness products the breakthrough areas for Estonian manufacturing!

In order to achieve this, the two areas need to be set at the focus of national activities, their development to be actively led, and cooperation to be launched between the public and private sectors as follows:	
Set as a focus for bringing FDI into Estonia	<b>1.</b> <ul style="list-style-type: none"> <li>• In providing incentives and support to foreign investors, give preference to investments which bring a significant part of value chains or useful know-how and technology to Estonia</li> <li>• Actively search for potential foreign investors, particularly for greenfield investments</li> <li>• Create national brands, e.g. following the example of Cleantech Finland</li> </ul>
Support the entry to foreign markets	<b>2.</b> <ul style="list-style-type: none"> <li>• Join the main thematic international networks of countries and companies</li> <li>• Create national brands, e.g. following the example of Cleantech Finland</li> <li>• Develop regional strategies to support entry to new rapidly growing big markets and the markets of Eastern Europe and the CIS states</li> <li>• Initiate bilateral 'ice-breaker programmes' to reduce the barriers to entering markets</li> </ul>
Ensure required skills and knowledge	<b>3.</b> <ul style="list-style-type: none"> <li>• Support the development of degree and vocational study programmes focussed on the understanding and developing of underlying technology and solutions, particularly in international cooperation with foreign academic institutions</li> <li>• Increase national education ordering in these areas</li> <li>• Integrate subjects from these fields into other study programmes, especially in field of economics</li> <li>• Increase further education and retraining ordering and offering for professional and vocational skills in these areas, including as part of labour market measures</li> <li>• Attract foreign specialists to Estonia, for which is useful to establish an upper limit on labour taxes and simplify the immigration procedures for highly skilled specialists</li> </ul>
Initiate growth programmes to lead the development	<b>4.</b> <p>Within the programmes:</p> <ul style="list-style-type: none"> <li>• conduct foresight on changes in demand and competition in the global market and the development of Estonian manufacturing industry in these areas</li> <li>• raise awareness of global trends and growth opportunities</li> <li>• mobilise the relevant people and establish cooperation platforms</li> <li>• instigate and launch strategic initiatives</li> <li>• invest in start-up growth enterprises and provide business development support</li> </ul>

## The foresight path to conclusions and recommendations

We launched the 'Industry Engines 2018' foresight project by identifying and analysing from foreign research sources global business and industrial trends. A workshop was held in May 2008 to sift through these trends.

In summer 2008 we conducted 50 interviews for obtaining an overview of how industrialists and major foreign investors themselves view the future of Estonian manufacturing industry. Interviews covered more than half of the added value of current exports of Estonian manufac-

turing industry in terms of the companies interviewed.

Etlatiety Oy - Finland's leading economic institute - assisted the Development Fund in analysing the global trends and charting the state of Estonia's industry.

The conclusions drawn from the foresight with regard to the growth opportunities for Estonian manufacturing industry were discussed and developed further with almost 50 industry leaders in three workshops held in November 2008. We pre-

sented these conclusions more broadly at the Manufacturing Industry Forum held on 2 December 2008, which was attended by 150 key people shaping the future of Estonia's manufacturing industry in both the state and private sectors.

This was followed by an analysis of the steps needed to be taken for making the most of the identified growth opportunities and the drafting of policy recommendations, for which we met with a number of state agencies throughout 2009.

Estonian Development Fund  
Tornimäe 5, 10145 Tallinn  
Tel +372 616 1100  
[www.arengufond.ee](http://www.arengufond.ee)

The Estonian Development Fund is established by the Parliament to identify new sources of economic growth through foresight and to invest in knowledge-intensive and ambitious Estonian start-ups.



**Manufacturing  
Industry Forum 2008**

### See also:

Foresight materials and final report of 'Industry Engines 2018' at  
[www.arengufond.ee/eng/foresight/industry/](http://www.arengufond.ee/eng/foresight/industry/)

Video footages, summary and slides of the Manufacturing Industry Forum on 2 December 2008 at  
[www.arengufond.ee/eng/videocasts/videocast655/](http://www.arengufond.ee/eng/videocasts/videocast655/)

Video footages, summary and slides of Development Fund's 'Environmental Technology as the Engine of Industry 2018?' Coffee Morning seminar at  
[www.arengufond.ee/eng/videocasts/videocast1244/](http://www.arengufond.ee/eng/videocasts/videocast1244/)