
Hidden Champions of Estonia

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Overview

Official name: Republic of Estonia
Type of government: Parliamentary Democratic Republic
Population in 2010: 1,340,161
Land area: 45,227 km²

History

Twelfth century An administrative division had developed in which the ethnical borders of today's Estonia can be recognized.

1208/1227 The invasion of German and Danish crusaders (the Christianization).

1227–1918 Estonia divided between German, Russian, Swedish, Danish, and Polish-Lithuanian rulers.

1918 (February 24th) Estonia declares its independence.

1918/1920 Estonian War of Independence: Soviet Russia against the Republic of Estonia.

1920 (February 2nd) Soviet Russia recognizes the Republic of Estonia (Tartu Peace Treaty)

1921 Leading countries in the world recognizes Estonia *de jure*; Estonia becomes a full member of the League of Nations.

1940 The Soviet Union occupies Estonia; a pro-Soviet puppet government is formed; Western countries do not recognize the changes carried out by force in the Baltic countries.

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1941/1944	Invasion by Nazi Germany and the Red Army during WWII; reoccupation by the Soviet Union.
1980s	The Estonian independence movement (described as the Singing Revolution).
1991	(August 20th) The Estonian Supreme Soviet proclaims Estonian independence, thus restoring the Republic of Estonia; within a few years all countries in the world (including the former Soviet Union and Russia) recognize Estonian sovereignty.
2004	Estonia achieves full membership of NATO and joins the EU.
2011	(January 1st) Estonia adopts the single European currency, the Euro.

1 Introduction: Context

Estonian initiatives are better known in the world than Estonia as a country. The following two examples help explain. Probably the most famous initiative related to Estonia is Skype. Skype software, as an Internet peer-to-peer communications application, was invented and developed by Estonians Ahti Heinla, Priit Kasesalu, Jaan Tallinn and Toivo Annus in Estonia. Together with entrepreneurs Niklas Zennström (Sweden) and Janus Friis (Denmark), they launched the first version of Skype on 29 August 2003, and by the following October over 1 million people had downloaded the software. In September 2005, 100 % of the shares of Skype Technology SA were acquired by e-commerce company eBay for 2.6 billion US dollars, and in April 2006, the number of registered users of Skype reached 100 million.

Today, most of the development team and 44 % of the overall employees of Skype are still located in Estonia. At the end of 2010, it is estimated that the number of Skype accounts totalled more than 660 million and there were approximately 145 million active users. According to TeleGeography Research, in 2010 Skype had a 13 % market share in the international call market. On 28 March 2011, Skype reached 30 million concurrent users online for the first time. On 10 May 2011, Microsoft Corp. acquired 100 % of Skype for 8.5 billion US dollars.¹

The second example involves two Estonians named Toomas Trapido and Rainer Nõlvak, who in the autumn of 2007 initiated the idea to clean up illegally dumped waste across Estonia—in 1 day! Within a few weeks several people joined the initiative group and created a “Let’s Do It” team. From October 2007 to April 2008, with the help of hundreds of volunteers, the team geo-mapped about 10,000 tonnes of waste strewn all over Estonia. On 3 May 2008, more than 50,000 people gathered voluntarily and cleaned up all the waste from forests and roadsides within 5 h.

¹ The data in this paragraph and the next are from various Internet sources.

During the following years, the same idea and model were introduced in Latvia, Lithuania, Portugal, Slovenia, Ukraine, Romania, Bulgaria, Moldova, Cambodia, Finland, Brazil, Russia and the CIS. A “World Clean Up” day took place on 24 March 2012. The vision was to have “a wave of 1-day countrywide clean-up sweep across the world, resulting in millions of tons of gathered waste, cleaner nature, as well as renewed and deeper connections between people, communities and nature”. The target was to involve 100 countries and 300 million volunteers in World Clean Up 2012. Both initiatives are disproportionately large compared to the size of Estonia. The country Estonia has a population of 1.34 million and is the fourth smallest EU member after Malta, Luxembourg and Cyprus.

The first signs of human activities on the territory of Estonia date back more than 11,000 years. However, during most of the last 1,000 years, foreign powers have ruled the Estonia and its people. Estonia was an independent country from 1918 to 1940. Between 1940 and 1991 it was part of Soviet Union, and the restoration of independence took place in 1991.

As all ex-Soviet countries and their allies, independent Estonia had to make a decisive shift towards a market economy. Entrepreneurship, privatization and foreign investments were some of the keywords in the 1990s. All this has shaped the landscape of the Estonian economy and provided a basis for bringing hidden champions (HCs) to the fore.

After joining NATO and the EU in 2004, and adopting the euro in 2011, Estonia has been fully recognized as a business society following Western principles. Yet, Estonia is still far below the EU average in terms of living standards. Main foreign trade and other economic indicators are presented in Exhibit 1. Clearly, GDP per capita grew significantly over the 1999–2009 period (average growth rate: 4.38 %). Long-term unemployment decreased and exports more than tripled; the most significant export increase was in fuels (shale oil). Based on the progress in the past decade and its current position and policies, Estonia believes it will develop in the near future faster than the EU27 average.

The Estonian HCs owe their success to certain key people who discovered how to use the strengths of their companies, and the opportunities that the environment offers. However, the government of Estonia has played a crucial role in creating a business- and living-friendly environment that gave fruit in several successful companies with strong competitive positions in narrow niches in international markets. When searching for HCs among them, we identified six talent pools that produce such companies in Estonia: (1) trading and travelling, (2) hard technologies, (3) traditional development, (4) former exiled Estonians, (5) ambitious young entrepreneurs, and (6), new technologies. The first four pools have to do with historical advantages and disadvantages that are characteristic of countries like Estonia. The latter two are new-wave pools, which generate achievements by entrepreneurial and creative people who start out in today’s business environment. This does not mean that success has been easier in the first four pools. Restructuring the old system and finding one’s unique path to the future has required a series of correct decisions, brilliant execution, and some luck. Many have tried but only a

Exhibit 1 Core economic indicators

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
GDP (current US\$, mio)	5,709.01	5,675.17	6,237.91	7,318.19	9,840.74	12,025.94	13,905.51	16,798.53	21,993.65	23,781.59	19,117.64	18,845.66	22,154.72
GDP per capita (current US\$)	4,150.04	4,143.93	4,572.91	5,386.39	7,270.28	8,912.79	10,330.24	12,503.12	16,392.72	17,738.52	14,264.01	14,062.23	16,533.37
GDP per capita growth (annual %)	0.49	10.19	6.70	6.99	8.17	6.68	9.11	10.31	7.64	-4.08	-14.05	3.34	8.29
Total unemployment (% of total labor force)	11.6	13.1	12.4	9.4	10.7	10	7.9	5.9	4.7	5.5	13.8	16.9	12.5
Long-term unemployment (% of total unemployment)	48.9	46.3	48.3	52.9	45.9	52.2	53.4	48.2	49.5	30.9	27.4	n/a	n/a
Foreign direct investment, net inflows (% of GDP)	5.35	6.82	8.70	3.89	9.34	8.03	22.49	13.17	15.59	7.88	9.76	10.89	1.97
Exports of goods and services (current US\$, mio)	4,021.68	4,800.88	4,979.55	5,190.85	6,808.83	8,787.90	10,807.12	12,212.56	14,751.63	16,896.33	12,436.84	14,968.95	20,273.61
Exports of goods and services (% of GDP)	70.44	84.59	79.83	70.93	69.19	73.07	77.72	72.70	67.07	71.05	65.05	79.43	91.51
Merchandise exports (current US\$, mio)	3,017.00	3,830.00	4,015.00	4,336.00	5,622.00	5,932.48	7,715.75	9,691.94	11,009.94	12,457.82	9,047.79	11,597.09	16,760.24

Merchandise exports to high-income economies (% of total merchandise exports)	71.61	77.77	70.00	68.67	69.62	77.60	74.42	67.74	63.45	64.47	66.64	65.37	n/a
Merchandise exports to developing economies in Europe & Central Asia (% of total merchandise exports)	26.24	20.13	23.60	25.71	27.41	20.83	23.23	25.65	30.39	31.00	27.14	30.69	n/a
Ores and metals exports (% of merchandise exports)	5.07	5.48	2.70	2.43	2.50	2.56	2.52	3.21	3.19	4.11	2.19	3.09	2.74
Agricultural raw materials exports (% of merchandise exports)	11.87	9.19	8.11	8.11	8.16	6.91	5.99	5.07	5.55	4.37	4.31	5.13	4.11
Food exports (% of merchandise exports)	11.02	8.02	10.07	11.72	10.64	9.32	8.08	7.53	9.29	9.23	10.15	9.90	8.92

(continued)

Exhibit 1 (continued)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Fuel exports (% of merchandise exports)	4.51	4.47	3.91	5.32	4.22	4.54	7.22	15.52	12.32	11.70	16.24	15.58	16.80
Manufactures exports (% of merchandise exports)	67.51	72.82	75.21	72.42	74.48	73.28	70.05	63.49	64.70	66.23	62.39	62.45	63.01
High-technology exports (% of manufactured exports)	13.50	29.93	19.28	11.86	12.66	14.00	14.66	12.63	5.80	5.40	5.68	9.02	n/a

Source: World Bank (2013)

few have reached the top. Let us consider each of the six pools and analyse their economic and historical roots that gave a burst of energy to the HCs.

First, trading and travel is an important pool of regional HCs. Why so? Estonia is located on the Baltic Sea, which for several centuries has played an important role as a trade route in northern Europe. During the Cold War, the Baltic Sea was a part of the border between East and West; and Tallinn, the Estonian capital, was one of the few gates in this border. In 1965, the sea route between Helsinki (Finland) and Tallinn was reopened, but only one ship travelled it until the end of the 1980s. Leaving the Soviet Union was quite complicated in those days; therefore the main passengers were Finns and other West Europeans. Estonian sailors got valuable experience serving the passengers on this route. This experience has contributed to the development of the fourth largest ferry company in the world, which now has about 50 times more passengers than 20 years ago.

Second, the natural resources of Estonia, viewed as hard technologies, gave birth to the second pool of HCs. Though Estonian territory is only 45,000 km², and is generally poor in mineral resources, it is endowed with oil shale. Estonia started using oil shale commercially in 1920s for producing fuels and shale oil. Oil shale products comprised 9.5 % of Estonia's total exports, although many countries were mining oil shale at that time. The world reserves of oil shale are larger than those of crude oil. The use of oil shale worldwide decreased significantly after WWII because crude oil and coal had higher calorific value and were much cheaper to obtain. To provide energy to the northwest portion of the Soviet Union (including Leningrad), the leaders of Soviet Union decided to utilize Estonian oil shale. Many investments were made; huge power plants fuelled by oil shale were built, and Estonia became the world's largest oil shale producer after the 1960s. Although production volumes have decreased by more than half from their peak in 1980, more than 80 % of oil shale used in the world today is mined in Estonia. The oil shale industry was revived in the 2000s, when oil prices remained high. The ultimate business secret and entry barrier today is the technology, i.e.,—how to make gasoline and oil shale products from oil shale in the most cost-effective and environmentally friendly way. Estonia is leading in these technologies.

Not all oil shale processing plants were reopened after WWII. The Soviet Union started processing uranium in a former Estonian oil shale plant. This was a closed military site called “Factory No. 7”. In 1970, this company started producing rare earth metals and rare metals. After 1990, the processing of uranium was halted. Today, the company is only one of two rare earth processing facilities in Europe—it is one of the world's leading producers of pure niobium and tantalum. By selling the majority of the shares to a US competitor in April 2011, the company secured a steady and secure supply of rare earth feed stocks.

Third, Estonia has an international competitive advantage in traditional development (agriculture), for example in breeding quails. Estonia started that activity in the 1970s, and by 1988 had developed an internationally recognized Estonian breed of quails. Today, Estonia has the largest quail farms in Europe. Japan has the world's largest quail farms, where of course they raise their own indigenous breed of quails.

Exhibit 2 Estonian hidden champions

Name	HC pool	Revenues 2010 (in M €)	Revenues 2000 (in M €)	Average employees 2010
	Main business field Market position			
Eesti Energia (Enefit)	Hard technologies Oil shale industry	796.2	275.9	7,353
	#1 oil shale industry in the world and #2 shale oil producer in Europe			
Järveotsa Vutifarm	Traditional development Quail farms	0.4	0.1	12
	#1 quail farms in Europe			
Kiviõli Keemiatööstus	Hard technologies Oil shale industry	26.6	7.7	647
	#3 shale oil producer in Europe			
Krimelte	Ambitious young entrepreneurs Construction materials	67.5	4.7	200
	#1 insulating foam producer in CEE			
Molycorp Silmet	Hard technologies Rare earth metals and rare metals industry	34.2	29.7	494
	#1-2 rare earth metals industry in Europe			
Playtech Estonia	New technologies IT	15.8	n/a	408
	Leading software developer for unified software platforms and content for the remote and land-based gaming industry in the world			
Tallink Grupp	Travelling and trading Maritime transportation	813.9	130.4	6,612
	#1 mini-cruises ferry operator in the world and #1 duty free & retail shop on ferries in the world			
Viru Keemia Grupp (VKG)	Hard technologies Oil shale industry	125.5	48.3	1,406
	#2 shale oil producer in the world and #1 shale oil producer in Europe			
Wendre	Former exile Estonians Textile industry	76.3	11.3	745
	Leading beddings manufacturer in Europe			

Source: Authors of the chapter

The fourth pool from which HCs originate are former exiled Estonians, endowed with expert knowledge and networks, developed through years of living abroad. In particular, during WWII, thousands of Estonians fled the country and restarted their lives in Western Europe, America, or Australia. After the restoration of independence, many of them or their children moved back to Estonia bringing their know-how, relationships, and capital to privatized companies. Their roots distinguished them from other foreign investors (the latter have also played a remarkable role in developing Estonian business and society). The most successful story from this pool comes from the textile industry—a businessman born in an Estonian family in Sweden has become a leading European beddings manufacturer in Estonia in only 15 years.

The fifth pool of HCs is made up of ambitious young entrepreneurs. Democracy and a market economy allowed everyone to start with his own business. The Soviet era had destroyed the traditions of family businesses and former entrepreneurs. On one hand there was a lack of knowledge and experience; on the other, there were few constraints. Most members of the new business generation created companies that resembled those of Western Europe—especially in the service sector, which was underdeveloped during the Soviet era. After securing positions of market leadership in Estonia, and in some cases, remarkably, securing market share in other Baltic countries, the founders sold their companies to large Scandinavian, or even global, companies. There are a few exceptions; those who were not satisfied with their leading position in the local market. They set out to be players on the world stage. One example comes from the construction materials business—an Estonian company is among the world's top five producers of insulating foam.

Lastly, the most transformative pool of HCs in Estonia involves new technologies—a challenge worldwide. The recent past has proved that it is possible to build a billion-dollar company within several years. Skype, which is already an IT software champion, is not the only success story in Estonia. Playtech—the world's largest software developer for unified software platforms and content for the remote and land-based gaming industry—also comes from the IT sector and is somewhat similar to Skype. The original IT competence came from Estonians, and the business competence was supplied by foreigners. Today, the company has expanded and opened new offices in several countries. It seems that the classic HC concept does not fit new technology initiatives. These teams have been international since the beginning, and the companies are not HCs just in one particular country.

As can be seen in Exhibit 2, Estonian HCs are diversified; some with strong global leadership, others with regional leadership. Some of them have revenues close to one billion euros, others have less than 1 million euros. Despite this diversity, all of them command a significant competitive strength in international markets. Two companies (Tallink Grupp and Eesti Energia) of the nine identified in Exhibit 2 are described in detail in the next part of this chapter.

2 Two Case Studies

2.1 Tallink GRUPP²

Overview

Address: Sadama 5/7, 10111 Tallinn, Estonia
 Tel: +372 6409800
 Email: info@tallink.ee
 Web: <http://www.tallink.ee> (customers), <http://www.tallink.com> (investors)

Company Information

Industry:	Sea and coastal passenger water transport services
Year of establishment:	1989
Sales revenue in 2010:	€814 million
Sales revenue in 2000:	€130 million
Average number of employees in 2010:	6,612
Brain(s) behind the company:	CEO Enn Pant

2.1.1 Nature of Market Leadership

Tallink Grupp is the number one mini-cruises ferry operator in the world, and the number one duty free & retail shop on ferries in the world by revenue. Northern Europe has the world's greatest passenger volumes in maritime transport. The nature of market demand in the northern Baltic Sea differs from the rest of Europe, where fast transfers (shuttles) dominate. Helsinki, Stockholm, Tallinn, and Riga are the capital cities and attractive short-break destinations. When taking mini-cruises, the passengers often overnight on the ferries and spend a lot of money in the restaurants and shops. Finland's Åland Islands in the northern Baltic Sea are exempted from the EU's VAT rules, and therefore ferries that stop over at the islands can offer tax-free sales.

2.1.2 Nature of Competitive Advantage

Tallink Grupp achieved a tangible advantage in the eyes of the customers by introducing state-of-the-art and cost-effective ferries in 2000s. Today, Tallink Grupp is the number two ferry operator in the world in terms of the gross tonnage of its ferry fleet, and number one in terms of its number of beds. Tallink Grupp's

²The content is based on an interview with Andres Hunt, the Vice Chairman of Tallink Grupp on 1 December 2010, Tallink Grupp's corporate factsheet and financial reports of Tallink Grupp (<http://www.tallink.com>).

main strengths include knowledge of the market, professional marketing, qualified employees, the atmosphere in the company, the decision-making processes, and last but not least, the continuity of leadership. Capital intensity and a fleet of ferries specific to the market, on the one hand, and knowledge of the market and the established distribution of the market, on the other hand, create barriers to the entry of new players. The living standard of people on the east coast of the Baltic Sea is increasing and business volumes still have the potential to go up in the Baltic North.

2.1.3 Core Lessons Learnt on the Path to the Business Success

1. The business environment is a strategic window—for some period it is closed (in this case during the Cold War) but those who are patient, prepared, and bold, can reap great benefits when it opens.
2. Customer behaviour is always local but meeting the clients' needs is always universal.
3. By focusing on a narrow regional market niche (i.e. oasis), instead of trying to play globally, you can become the world's top player in a particular service sector while the world's market concentration is low.

2.1.4 Tallink Grupp: Hidden Champion

Many business people have visited Frankfurt Airport or Paris Charles de Gaulle Airport and probably spent their time and money shopping there. Did you know that the Estonian maritime company Tallink Grupp made the same amount of revenue in duty free & travel retail shops as the airports in Frankfurt or Paris in 2010, and that this is more than what was earned at London's Gatwick or Beijing's BCIA? Focusing on niche maritime mini-cruises in the northern Baltic Sea, Tallink Grupp has become the world's largest mini-cruise ferry operator in terms of revenue, and the world's largest duty free & retail shop on ferries.

In 1989, a company named Tallink was founded as a Finnish-Soviet joint venture. It was the so-called perestroika era and many cases of this type of cooperation with foreign partners were initiated. The original business idea of Tallink was to transport tourists between Helsinki (Finland) and Tallinn (Estonia). One founder, the Estonian Shipping Company (ESCO), already had experience serving that route since 1965. In 1993, when the Finnish partner sold its shares, Tallink became a fully Estonian-owned company. Since the end of 2001 the company's official name has been Tallink Grupp. Today it is a NASDAQ-OMX listed company (TAL1T). Forty percent of its shares are owned by a single large Estonian shareholder who has representatives on the company's management board; another 40 % belong to foreign investment funds and banks; and 20 % are held by small shareholders.

Northern Europe has the world's greatest passenger volumes in maritime transport, with more than 70 million passengers in 2009. The nature of the market demand in the northern Baltic Sea differs from that in the rest of Europe, where fast transfers (shuttles) are dominating. Helsinki, Stockholm, Tallinn, and Riga are capital cities and attractive short-break destinations. When taking mini-cruises, the passengers often overnight on the ferries and spend a lot of money in the restaurants

and shops. Finland's Åland Islands in the northern Baltic Sea are exempted from the EU's VAT rules. Therefore, ferries that stop over at the islands can offer tax-free sales. For example, 55 % of Tallink Grupp's total revenues come from restaurants and shops, and less than 30 % from ticket sales.

In 2010, the total turnover of Tallink Grupp was 813.9 million euros, including 450–500 million earned in mini-cruises. The average annual turnover growth in the past 10 years has been 20 %. In 2010, 8.4 million passengers travelled by Tallink Grupp's ferries. The average number of employees in 2010 was 6,612. According to the ShipPax Market 2010 report Tallink Grupp was the fourth largest ferry operator in the world in terms of revenue. It had the second largest gross tonnage and the largest number of beds.

Since the market demand and business environment in the Baltic North are unique, the main competitor comes from the same region—the Finnish ferry operator Viking Line. Until the mid-2000s, Viking Line was the largest ferry operator in the Baltic North. In 2006, Tallink Grupp acquired Silja Line (Finland), which had been Viking Line's competitor for ages. This strategic move strengthened Tallink Grupp's position on the route between Estonia and Finland and provided an opportunity to enter into new routes between Finland and Sweden. Although Viking Line and Tallink Grupp have similar business models, successful mergers and organic growth have helped Tallink Grupp to grow into the largest ferry operator in the northern Baltic Sea (its revenue is twice as large as that of Viking Line today, and Tallink Grupp has more than 50 % market share on each main route).

One of the main reasons for Tallink Grupp's success has been the strategic decision, made by the company's management at the end of 1990s, to own outright the fleet that the company needs for operations (It is very common for operators to charter ferries). Vice Chairman, Andres Hunt, explains, "If we believe in sustainable business on our routes, and the ferry operates 12 months a year, it is cheaper to own the ferries, and pay loan interest to the bank, than to rent the ferries from a chartering company, which is also paying a bank interest". So, Tallink Grupp started buying ferries, and in 2000 the management decided to start building new ferries for the company. Tallink Grupp achieved a tangible advantage in the eyes of its customers by introducing state-of-the-art and cost-effective ferries. At the beginning, competitors were rather pessimistic about the ferry building and reacted only after Tallink Grupp had changed the market standards.

Depending on the route, mini-cruises last from 14 to 36 h (for comparison, Tallink's shuttles between Helsinki and Tallinn take only 2 h). The mini-cruise product consists of a set of services, but Tallink Grupp does not have a specific competitive advantage at the product level. Sometimes the entertainment programmes that are offered on board make the difference, but these can easily be copied. Half of the customers are Finns and sales to foreign customers (i.e. export) account for approximately 83 % of total revenue in 2009. Travel agencies, which contribute 40 % of sales (the rest is sold by Tallink Grupp itself), function as distribution channels.

From the customer's point of view, the most important product characteristics are keeping to schedules (departure and arrival on time), information

(advertisement), product quality, and price. Tallink Grupp believes that it is slightly better in the first three categories, while Viking Line tends to offer lower prices. Tallink Grupp's main strengths include knowledge of the market, professional marketing, qualified employees, the atmosphere in the company, the decision-making processes, and last but not least, the continuity of leadership.

The current CEO, Enn Pant, has been in charge since December 1996; prior to that the company's management consisted of experienced captains. Today all four members of the Management Board have business and finance backgrounds: "We know how to deal with money!" Vice Chairman Andres Hunt says. As leaders, the management board members are rather similar, although each has a unique approach for dealing with issues. As a team they are good at developing strategies and executing them. Looking back at 10 years of achievement, the leaders of Tallink Grupp are especially pleased with the competitive position and growth of the company. Also, Tallink Grupp suffered less during the last economic recession than business in general.

Looking into the future, Tallink Grupp sees a lot of potential in its current niche. The living standard of people at the East coast of the Baltic Sea is increasing and business volumes may go up without moving to other regions.

What does the Tallink Grupp case teach us? Doing your business in a supportive environment and meeting the clients' wishes are universal success factors, but focusing on a narrow regional market niche (i.e. oasis) at the same time, instead of trying to play globally, may still make you the world's top player in a particular service sector while the level of market concentration is low.

2.2 Eesti Energia AS (Enefit)³

Overview

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Tel: +372 7152222
Email: info@energia.ee
Web: <http://www.energia.ee>, <http://www.enefit.com>

Company Information

Industry:	Electricity
Year of establishment:	1939
Sales revenue in 2010:	€796 million

³The content is based on interviews with Sandor Liive, CEO of Eesti Energia on 30 December 2010 and Harri Mikk, Member of the Management Board of Eesti Energia on 29 December 2010, as well as on the financial reports of Eesti Energia and the company's web pages (<http://www.energia.ee> and <http://www.enefit.com>).

Sales revenue in 2000:	€276 million
Average number of employees in 2010:	7,353
Brain(s) behind the company:	CEO Sandor Liive & Board Member Harri Mikk

2.2.1 Nature of Market Leadership

Enefit is the number one producer of oil shale electricity in the world and the second largest producer of shale oil in Europe. Oil shale is a sedimentary rock that can be found underground; it is a fossil fuel. For about 50 years, Enefit has mined more oil shale than anyone else in the world. The company earns its main revenue from selling electricity and network services (77 %), shale oil (7 %), heat (6 %), and oil shale (4 %). Exports comprise 18 % of total sales. Enefit is the second largest producer of shale oil in Estonia, and therefore in Europe, since Estonia is the only country in Europe where shale oil is commercially produced.

2.2.2 Nature of Competitive Advantage

Although many countries intensively used oil shale between WWI and WWII, it was replaced by crude oil and coal for economic reasons. Estonia continued to develop methods for processing oil shale and today possesses unique technologies that allow oil shale to be utilized in an efficient and environmentally friendly way. The world's reserves of oil shale are about 3.5 times greater than those of crude oil today. The higher the world price of crude oil, the better the perspectives for the oil shale industry.

Shale oil has been a fuel for ships and boiler houses as an alternative to crude oil products. Enefit is now developing a new complex to produce high quality Euro 5 diesel fuel, suitable for road vehicle use. As long as the world price for Brent crude oil is above \$60 US dollars per barrel, shale oil fuel is competitive. Launching the shale oil upgrader in 2016 will create new horizons for a company that knows how to work with oil shale. The oil shale business requires technological know-how and the control of oil shale reserves. Enefit has contracts for the use of the latter in the US, Jordan, and Estonia.

2.2.3 Core Lessons Learned on the Path to Business Success

1. Energy security is not just a political issue—in a world where resources are limited, it is also an economic issue. When cheap crude oil runs out, the second best alternative in economic terms will take its place. To establish your competitive strategy, assess how long the dominant product can be sold cheaper than your product and prepare yourself for market penetration. Being hidden but awake may require support from the government.
2. Innovate because your product is never good enough—and some day you may discover that the whole world wants to be your client.
3. Access to resources and technological know-how are extremely important.

2.2.4 Eesti Energia: Hidden Champion

Did you know that Estonia has the second-lowest average electricity price in the EU27? About 90 % of the electricity generated in Estonia is produced from oil shale, a sedimentary rock that can be found underground all over the world. It is a fossil fuel. The Estonian word for “oil shale” is translated as “burning rock”. Estonia has been the world’s largest oil shale miner and user since the 1960s.

Oil shale mining in Estonia started in 1916. The main reason was the lack of fuels during and after WWI. Several private and state-owned oil shale mining companies were created in the first decades. In Soviet times, all mining was centralized under one company—Eesti Põlevkivi (Estonian Oil Shale).

In 1939, Eesti Energia was founded with the aim of building a countrywide electricity grid to link various power stations in Estonia and achieving an optimal division of electrical power. In the 1940s and 1950s, the leaders of the Soviet Union decided to utilize Estonian oil shale to provide electricity for the northwestern part of the Soviet Union (including Leningrad). Two power plants fuelled by oil shale were built and incorporated into Eesti Energia between 1956 and 1973.

After the restoration of independence, the future of the oil shale industry in Estonia was in doubt. There was intense discussion at the highest levels. Availability of cheaper crude oil products as an alternative fuel, the investment requirements, and concern for the environment were arguments against the oil shale industry, whereas energy security, balance of trade, and jobs were arguments for it. Although there were concerns about the prospects for oil shale, the administrative prices of oil shale and electricity were at a level that Eesti Põlevkivi and Eesti Energia were able to sustain without subsidies and in the closed electricity market the end consumers had to accept the prices.

In 1998, Gunnar Okk joined Eesti Energia as the new CEO. Gunnar Okk built a new management team and started to introduce reforms and modernization measures in the company. In 2003, Eesti Energia acquired 100 % of the shares of Eesti Põlevkivi; thus oil shale mining and electricity generation were united into one concern, 100 % owned by the Estonian state. Since 2005, Sandor Liive has been the CEO of Eesti Energia (he started in the company as financial director and member of the management board in 1998).

In 2010, the total turnover of Eesti Energia was 796.2 million euros. The company earned its main revenue from selling electricity and network services (77 %), shale oil (7 %), heat (6 %), and oil shale (4 %). Exports comprised 18 % of total sales. The 10-year-growth of total turnover has been on average 11 % per annum. Eesti Energia had about 470,000 residential and 26,000 business customers. In 2010, its average number of employees was 7,353. Eesti Energia mined a total 14.0 million tonnes of oil shale geological resource, of which 17.9 tonnes of saleable oil shale was produced in 2010. The Eesti Energia concern utilized 89 % of all that saleable oil shale. Based on these numbers, it is the world’s largest oil shale company. It produced 190,000 tonnes of shale oil in 2010, which made the company the second largest shale oil producer in Europe.

Today, oil shale is used commercially only in Estonia, China and Brazil. There are two private competitors in Estonia, VKG Group and Kiviõli Keemiatööstus, but

the main focus of these companies is on shale oil extraction, not electricity generation. The Estonian competitors previously depended on oil shale mined by Eesti Energia and only recently have they opened their own mines. The largest competitor in the field of oil shale is Fushun Mining Group Co that operates in China. The main activity of that corporation is coal mining, but according to the latest available data, Fushun also mines more than ten million tonnes of oil shale annually. In Brazil, the large multinational energy company Petrobras also deals with oil shale mining but the volumes are less than three million tonnes annually.

Although historical decisions, government regulation, and support during difficult times have played a very important role in putting Eesti Energia on the oil shale map today, the reasons for this success clearly lie in the continuity of leadership and the company's long-term strategies. Between 2001 and 2010, Eesti Energia has invested about 1,780 million euros (80 % of these investments have been financed from current business cash flows) in the upgrade of the distribution network, construction of new oil shale power plants, upgrade of oil shale mining equipment, construction of wind parks, environmental projects and other activities to provide customers with environmentally sustainable electricity and high-quality liquid fuels. Decisions on investments in projects valued at about 2,500 million euros for the next 10 years have already been made.

As Sandor Liive, the CEO of Eesti Energia explains: "As the leader, I discuss and agree our long-term directions—where we want to move. We have ambitious goals and we want to achieve them. Facing obstacles does not dampen our will; quite the opposite, it increases it. Our key people are like springs—the more you push them, the higher they jump. This is typical of our team, although as leaders and team members, everybody has a different style and background. My main task as the leader of Eesti Energia has been to find the right people with an entrepreneurial spirit for the team and provide them with sufficient freedom".

The gradual opening of the electricity markets in the Nordic and Baltic countries provides excellent export opportunities for Eesti Energia's cheaper electricity; in 2010, almost half of company's revenues and over 60 % of its profits came from the open markets.

At the same time, Eesti Energia's core business—oil shale—faces unlimited opportunities in the future. The reserves of cheap crude oil in the OPEC countries and Russia are decreasing and the market responds with higher market prices. As long as the market price for Brent crude oil is above 60 US dollars per barrel, shale oil fuel is competitive. Extracting shale oil adds more value to the rock than just burning it for electricity generation. Eesti Energia is developing an industry complex, complete with shale oil upgrader to produce high quality Euro 5 diesel fuel in 2016, suitable for road vehicle use.

The oil shale business is a business that requires technological know-how and the control of oil shale reserves. For the extraction of shale oil, Eesti Energia has developed Enefit-280 technology—the first new generation oil plant—and it was put into service in 2012. Eesti Energia is believed to have the world's most efficient oil shale processing technology. Electricity generation by oil shale may gradually be replaced by renewable energy carriers—in the Estonian case, by wind, biomass,

and waste. The idea of a nuclear power station is not unrealistic either for the leaders of Eesti Energia.

The world's proven reserves of oil shale are more than 3.5 times larger than the reserves of crude oil today. About 70 % of those are located in the US and significant reserves also exist in about 14 other countries, including Russia, the Democratic Republic of Congo, Brazil, Italy, Morocco, Jordan, and Australia. The hunting season for acquiring the best oil shale reserves in the world has already opened. Eesti Energia has contracts for the use of oil shale in the USA and Jordan. By launching their new diesel fuel refineries and new generation Enefit-280 plants, each using 2.26 million tonnes of oil shale annually to produce 290,000 tonnes of shale oil, 75 million cubic metres of highly energy-efficient retort gas, and 280 GWh of electricity—Eesti Energia will become one of the big champions. The potential is huge: the world consumption of shale oil products currently totals about 0.02 % of the world consumption of crude oil products! As Sandor Liive points out: “The destiny of companies and individuals is shaped by creating dreams or visions and the will to win, the will to make your dreams come true. We enjoy winning!”

What can we learn from the case of Eesti Energia? Energy security is not just a political issue; in a world where resources are limited, it is also an economic issue. When cheap crude oil runs out, the second best alternative in economic terms will take its place. To establish your competitive strategy, assess how long the dominant product can be sold cheaper than your product and prepare yourself for market penetration. Being hidden but awake may require support from the government. You have to innovate because your product is never good enough; and some day you may discover that the whole world wants to be your client. And last, but not least, the access to the resources and technological know-how is extremely important.

Reference

World Bank. (2013). *Data; countries and economies*. <http://data.worldbank.org/country>