

# **Cleantech industry in Lithuania:**

beautiful minds at work

# Investment opportunities in Lithuania's clean technologies sector:

- Proximity to Nordic and Western European consumer markets in high demand for advanced technology products
- Political will to increase renewable energy share by 2020 in line with EU policy
- Political will to raise the share of products of IT, laser technologies, biotechnologies, nanotechnologies and materials science to 25 % of the national GDP and 80 % of national exports by 2015
- Pool of 18,000 researchers and scientists
- Network of 5 commercialization centres (valleys), including the First Baltic Medical and Pharmaceutical Valley in the Baltic States, and developing solar energy cluster
- Fiscal incentives for FDIs into new technologies and R&D
- Highly competitive quality and cost ratio offer for solar, biomass and other alternative energy RtD investment projects

## State Policy to Foster R&D and Innovations

Following the experience of other countries with high achievements in the field of innovation (Finland, Sweden, Norway, the Netherlands, Ireland and Great Britain) in 2010 Lithuania approved the first large-scale Lithuanian Innovation Strategy for the Year 2010-2020 (the Strategy). It is a long-term strategic planning document which sets vision, objectives, goals and results to be achieved in the field of Lithuanian Innovation up to 2020. The goal of the decade's vision is ambitious — Lithuanian summary innovation index should reach the European average in 2020. The Strategy has reinstated the long-term objective of innovation policy: to build a creative society and create conditions for the development of entrepreneurship and innovation. The implementation of this objective is intended along four principal directions:

SPAIN

- enhancing the Lithuanian integration into the global market ("Lithuania without borders");
- educating a creative and innovative society;
- developing broad-based innovation;
- implementing a systematic approach to innovation.

"Lithuania is a perfect place to generate and implement new ideas a peaceful and tension-free environment conducive to business, with engineering potential and vast possibilities for business and science collaboration, plus a good choice of skilled labour and managerial staff".

> Wally Olins, Saffron Brand Consultants

NORWAY SWEDEN Baltic Sea Latvia Latvia Belarus Belarus Belarus

The Strategy distinguishes the high-potential sectors of

- biotechnologies and laser technologies
- industry of electricity and optical equipment
- clean technologies
- future energetic
- creative industries
- welfare and wellness

Immediate to the Strategy Lithuania drafted and approved the Implementation Action Plan for the year 2010–2013 (the Action Plan) defining the specific measures to attain the objectives established.

The Action Plan envisages diverse financial instruments to promote the business and science sector co-operation, develop innovation activities of enterprises, streamline the services of the public sector, improve the competence and capacities of human resources, as well as numerous non-financial measures that will contribute to the development of the environment favourable to innovation.

Mediterranean Sea

TURK

# **RENEWABLE ENERGY:** Prerequisites for a kickstart

Aligning state policy with the leadership of the European Union to fight climate change, Lithuania has set a 23 % renewable energy share (RES) target for 2020. RES stood at 15 % in year 2010, dominated by hydro power. As set in the National Renewable Energy Development Strategy, by 2020 RES will reach 10 % in transport (currently at 4.3 %), 21 % in electricity production (currently at 5 %), 36 % in the heating/cooling sector (stood at 28 % in 2010) and 60 % in centralized district heating (15 % in 2010).

### **Feed-In Tariffs**

Following the best European practices, Lithuania uses feed-in tariffs to promote renewable energy. Targeting the most cost-efficient energy production, the National Control Commission for Prices and Energy sets the purchase prices of green electricity (FIT). The current FIT, applicable from 1st of January, 2009 (FIT for the solar power applies from January 1, 2010) are as follows:

Resource	Technology	Support level [EUR/ kWh]
Hydro	Under 10 MW	0.08
Wind	Onshore	0.09
Wind	Offshore	0.09
Biomass	Any	0.09
Solar	Under 100 Kw	0.47
Solar	Under 1 MW	0.45
Solar	More than 1 MW	0.44

Source: INVEST LITHUANIA Analyst team

### Case Study DEVELOPING SOLAR ENERGY CLUSTER

In 2010, pursuing rapid growth of the cleantech industry, the Lithuanian Government provided grants for a number of companies to implement experimental (c-Si) photovoltaic cell production project and develop a solar energy cluster in the country.

Lithuanian business enterprise Precizika-MET SC, part of Hexagon global measurement technologies group, pioneered the solar industry development in Lithuania by launching an Industrial Photovoltaic Laboratory in the capital city Vilnius at the beginning of 2010. The unique potential of local human resources as well as know-how, which in its time existed in a well-developed sector of micro-electronics in Lithuania, was successfully incorporated to use as a basis of the laboratory. The 1300 m<sup>2</sup> plant will employ 25 specialists. The Company invested EUR 2.9 million in the factory. The solar batteries, produced in the new factory, will be exported to Korea and the Netherlands.

Companies BOD Group, Baltic Solar Energy and Baltic Solar Solutions will also construct a 25,000 m<sup>2</sup> facility in a commercialization centre (valley) in Vilnius for solar cell and solar module production lines. Some 500 new jobs are expected to be created by 2016-2018 along with investments reaching up to EUR 58 million and industry's share amounting to EUR 434 million in the Lithuania's export portfolio.

The turnover of all four above-mentioned companies belonging to the photoelectric technology cluster is forecast to reach EUR 463 million in Lithuania.

Lithuania provides a very competitive case to investors willing to launch a photovoltaic R&D centre, as a benchmark study from Invest Lithuania in partnership with fDiBenchmark.com of the Financial Times Ltd. shows below. Lithuania is leading with a very balanced quality and cost ratio leaving the already set European solar hubs such as Germany and Spain, as well as some Central and Eastern European (CEE) locations such as Poland or Hungary behind.

#### fDi Benchmark – Location Attractiveness Index

The location attractiveness index shows the overall attractiveness of the 5 selected locations for the Photovoltaics R&D centre1\* profile. The ratio of quality to cost (Quality:Cost) is (50:50).

Photovoltaics R&D centre1\* (Head Count: 20) - fDi Attractiveness Index Tool (50% Quality : 50% Cost)



### **INDUSTRIAL BIOTECHNOLOGY:** a new business niche

Industrial biotechnology became a rapidly growing sector of Lithuanian economy in the past decade, especially production of biofuel, and is going to continue growing in the years to come. Annually Lithuania produces biomass excess that can be reproduced to biofuel: • around 1.0 million tons of surplus grain

- more than 4.5 million tons of residual biomass and waste products from stockbreeding
- more than 2.5 million m3 of forestry residues formed during wood manufacturing

# AUTOMOTIVE SECTOR: a pilot market for electric cars

The Lithuanian Government has initiated a feasibility study to set forward the goals and objectives in pursuit of electric cars infrastructure in Lithuania. The study expected to be completed by 2013 shall cover infrastructure needs, product demand and supply, and pilot e-cars parks (taxis, utilities or other public service providers). Lithuania aims to become a pilot e-cars market for the CEE region. The Government has discussed with Better Place, a pioneering electric cars infrastructure company, regarding the provision of Company's know-how to local engineer teams meant to develop the e-cars cluster in the country.

# **Engineering students available**

	Bachelor's degree		Master's degree	
	Mechanical Engineering	Electronic Engineering	Mechanical Engineering	Electronic Engineering
Vilnius Gediminas Technical University	520	826	100	108
Kaunas University of Technology	526	668	124	123
Klaipeda University	160	n/a	11	n/a
Siauliai University	216	165	n/a	18
Vilnius Pedagogical University	224	n/a	n/a	n/a
Lithuanian University of Agriculture	447	n/a	117	n/a
Vilnius University	n/a	148	n/a	31
Total	2093	1807	352	280

Source: Statistics Lithuania

#### INVEST LT+ cash grants by the Lithuanian Government

Foreign investors interested in locating a R&D business in Lithuania as well as foreign companies already operating on the Lithuanian market but eager to further expand may apply for INVEST LT+ financial investment support of up to EUR 3.5 million per investment project.



# Tax Incentives and Financial Support

### Tax incentives for investments into R&D\*

- Triple deduction: The costs of R&D, except for depreciation or amortisation costs of fixed assets, shall be deducted three times from income for the tax period during which they are incurred where the scientific research and/or experimental development works carried out are related to the usual or intended activities of the entity which generate or will generate income or economic benefit.
- Super-accelerated depreciation: Depreciation or amortisation costs of fixed assets used to carry out REtD shall be deducted from income in accordance with the procedure laid down in Law on Corporate Income Tax of the Republic of Lithuania. The terms of depreciation and amortisation applied to such fixed assets are reduced, namely, 2 years instead of 3-8 years to respective assets (machinery, software etc.).
- Reduction of taxable profits: The entity carrying out an investment project may reduce the taxable profits by the amount of the actual costs incurred for the acquisition of the assets during the tax period. The taxable profits shall be reduced if the assets are necessary for the entity to carry out the investment project and:
- the assets are attributable to the class of fixed assets:
  - plant and machinery,
  - installations (structures, wells, etc.),
  - computer and communications equipment (computers, computer networks and software),
  - software,
  - acquired rights, and
- the assets have not been used and were produced not earlier than two years ago (as calculated from the date when such fixed assets were put into use).

Taxable profits calculated for each tax period may be reduced by 50 %. Where the amount of costs exceeds 50 % of the amount of taxable profits calculated for a tax period, the costs exceeding this amount may be carried forward to reduce the amounts of taxable profits calculated for the four subsequent tax periods, respectively reducing the amount of the costs carried forward. The taxable profits may be reduced only by the costs incurred during the tax periods of 2009–2013.

\* Incentives are of general guidance and may differ in specific circumstances.

 Corporate tax
 0 % of profit tax in first 6 years and 50 % reduction of profit tax value in next 10 years, and no real estate and land taxes in in Lithuania's two free economic zones.

Land / real estate tax Land (1,5 %) and/or real estate (0,3-1 %) tax relieves through local municipalities. incentives

# **Information and Service Point**

INVEST LITHUANIA is a team of more than 30 professionals actively working to facilitate foreign investors in Lithuania, as well as to spread the word all around the globe about immense business opportunities on the biggest market among the Baltic countries. INVEST LITHUANIA is ready to make your dreams turn into a real success story of your business in Lithuania, the Northern Europe Innovation Centre 2020.

The agency has helped such companies as BARCLAYS BANK (UK), WESTERN UNION (USA), MOOG (USA), IDEAL INVENT Technologies (India), SYSTEMAIR (Sweden), SEB (Sweden), CIE AUTOMOTIVE (Spain), IBM (USA), FINNFOAM (Finland), INDORAMA (Thailand), DEMATIC (Germany), RGE (UK), ALBRIGHT INTERNATIONAL (UK), CHRISTIE TYLER (UK), MARZOTTO (Italy), METSO PAPER (Sweden), INVACARE HOGH (Denmark), GLENDALE CABINS (UK) and many others to start doing business in and with Lithuania.

### INVEST LITHUANIA. Working answers.

"I have worked with a number of groups such as yours over the years and I can safely say that the professionalism, flexibility and speed of execution was without doubt the best I have experienced."

David Larkworthy, SVP Head of Operating Strategy, EMEA-APAC, Western Union Financial Services

"When we started collaborating with the Ministry of Economy and INVEST LITHUANIA, we received a very favourable standpoint and much interest as well as support, and decided not to look elsewhere."

Premkumar Bhagwatsaran, CEO of Ideal Invent Technologiess





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