



# **National Reform Programme “ESTONIA 2020”**

***(approved by the Government on 28 April 2011)***

## INTRODUCTION; OVERVIEW OF THE ESTONIA 2020

The Estonia 2020 is Estonia's competitiveness strategy for achieving the objectives of Europe 2020. This version of the plan was submitted at the end of April to the European Commission simultaneously with the Stability Programme. The plan describes the policy priorities and measures to be implemented for the purpose of raising Estonia's competitiveness, sets goals for 2015 and 2020 in harmony with the objectives of the Europe 2020 strategy and challenges for Estonia, and lists the obligations to be assumed by Estonia in March 2011 in the framework of the Euro Plus pact agreed upon by the European Council in March 2011.

The strategy was compiled in conformity with the Government's Action Plan, the state budget strategy and the stability programme. A measure implementation action plan for the next four years will be appended to the plan.

### Process of compiling 'Estonia 2020'

The compiling of 'Estonia 2020' is part of the more stringent economic coordination in the European Union as implemented in the European Semester. For the first time this year, EU member states will prepare stability or convergence programmes and national reform plans at the same time; these documents specify the priorities for budget consolidation and structural reforms. Due to the general election held earlier this year, Estonia submitted its plans at the end of April.

The obligation of preparing the reform plans (the Estonia 2020 strategy, in Estonia's case) along with the European Union's common goals, were agreed upon in June 2010 at a European Council meeting. In November 2010, the government approved the draft of 'Estonia 2020' and an overview of further preparations (including the targets for 2020). This has been followed by broader involvement through the osale.ee website as well as by thorough analysis and discussions with ministries and partners for finding solutions and developing the further action plan. On this basis, descriptions of the primary policy priorities and measures were appended to the draft version of 'Estonia 2020'.

At the European Council meeting of 24-25 March 2011, the heads of government agreed on what is known as the Euro Plus pact, undertaking to carry out concrete reforms in member states in order to increase competitiveness. Four fields were defined: fostering competitiveness of the economy, fostering employment, stronger sustainability of public finances sector, and reinforcing financial stability, with regard to which the countries report on specific reforms to be carried out within one year. The obligations are documented in the national reform programmes (of which the Estonia 2020 strategy is one).

### The Estonia 2020 strategy:

- sets **targets for increasing competitiveness** for 2015 and 2020, the basis for which is the government coalition programme, the objectives approved by the government in November 2010 and the indicators in the Euro Plus pact;
- decides on the most important **competitiveness-related reforms**, in addition to the Euro Plus pact, the basis of which have been thorough interministerial discussions, the report on primary policy challenges, analysis of the most important new recommendations and existing measures and conformity with the governing coalition's programme for 2011-2015;

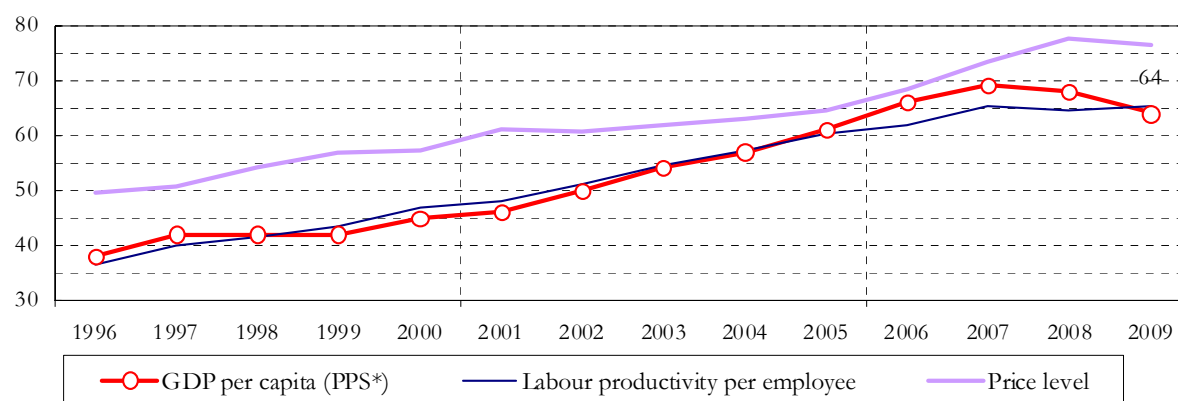
- **additionally** specifies **commitments** and concrete changes that the state will undertake in the year-long period starting June 2011 in order to implement the Euro Plus pact.

## ANALYSIS OF ECONOMIC PROSPECTS FOR ECONOMIC GROWTH

### Forecast for economic growth

Since regaining of independence in 1992, the Estonian economy has grown nearly tenfold. Estonia saw extraordinary economic growth from 2001-2007. A correction began already in 2007, when the growth rate began gradually decreasing in connection with a shift in the economic cycle. Up to the middle of 2008, this adjustment could be considered an expected development and one that improved economic competitiveness. As a result of the sharp decline in trade volumes in the world's economy at the end of 2008, however, Estonia's GDP dropped 5.1% year on year. In 2009, the drop in GDP was even steeper due to decreased domestic and foreign demand, reaching 13.9%.

**Figure 1.** Real convergence between Estonia and the EU (% of the EL27)



Source: Eurostat, Ministry of Finance

**The economic recovery began in 2010, pushed by export.** The faster than expected recovery of foreign demand and the adaptation of Estonian enterprises during the crisis paved the way for stronger growth in the industrial sector's export volumes. Consumers and investors' behaviour has not seen very rapid recovery and private consumption continues to be sluggish though the confidence has improved since spring 2009. The fact that unemployment continues to be high (despite some easing off) has an impact, as does the fact that banks' loan turnovers remain exceedingly low. In 2010, the Estonian economy returned to growth – reaching a 3.1% rate.

According to the Ministry of Finance's new spring forecast for 2011, economic growth will increase to 4% per year in 2011 and 2012, continuing to be driven by export, although the role of the domestic market in shaping economic growth will again start to increase. In the following years the real economic growth is forecasted to be close to 3.5%.

**Table 1.** Forecast for changes in selected macroeconomic indicators (%)

	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Real GDP growth	-13,9%	3,1%	4,0%	4,0%	3,6%	3,6%	3,4%
Consumer price index	-0,1%	3,0%	4,5%	2,8%	3,0%	2,8%	2,7%
Growth in employment	-9,2%	-4,2%	2,2%	1,9%	1,1%	0,9%	0,8%
Real wage growth	-5,0%	0,9%	3,5%	4,2%	4,6%	5,0%	5,2%

*Source:* Ministry of Finance spring 2011 economic forecast

### **Impact of measures on economic growth**

Compared to the baseline scenario of the economic forecast, Estonia's national target levels under the objectives of the Europe 2020 strategy are significantly more ambitious. In setting the targets, the presumption is that it will be necessary to implement new measures and carry out reforms. If the desired impacts materialize and the 'Estonia 2020' goals are achieved, the cumulative total impact of the measures and reforms on the changes in the primary economic indicators are summarized in the following table.

**Table 2.** Positive scenario with regard to macroeconomic indicators related to Estonia 2020

<b>%</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Real GDP growth	4,0	4,0	3,7	3,7	3,6	3,5	3,5	3,6	3,7	3,8
Growth in labour productivity	1,8	2,1	2,5	2,7	2,7	3,4	3,6	3,6	3,5	3,5
Increase in number of employed	2,2	1,9	1,1	1,0	0,9	0,0	-0,2	0,0	0,2	0,3
Unemployment rate	13,5	11,4	9,9	8,6	7,7	7,5	7,4	7,2	7,0	6,9
Real growth of export	15,9	5,5	8,2	9,1	9,7	9,3	9,2	9,2	9,1	9,0
Productivity, % of level in EL27	69,6	70,1	70,7	71,6	72,4	73,8	75,4	76,9	78,4	<b>80,0</b>
Employment rate, 20-64 year-olds	67,8	69,1	70,1	71,2	72,5	73,0	73,5	74,3	75,1	<b>76,0</b>
Share of world trade	0,099	0,097	0,097	0,099	0,101	0,102	0,104	0,106	0,108	<b>0,110</b>

*Source:* Ministry of Finance and the Government Office

In describing the possible impact, the precondition is that compared to the baseline scenario, a positive influence will accompany the rise of the employment rate and labour productivity starting in 2013, and that this influence will then increase over time. The first, more rapid and smaller-scale impacts should become apparent already in the coming years, but it will take more time for the major impact to make itself felt. This means that labour productivity and employment would rise 0.1-0.2 percentage points more during this period, and as a result thereof, economic growth would be 0.1 percentage point more in 2013, 0.2 pp faster in 2015 and 0.5 pp faster in 2020.

Compared to the data on which the economic forecast is compiled, the positive scenario means quite a small difference in the case of the employment target set in the plan, but in actuality, the objective will be rendered a serious challenge by the fact that long-term and structural unemployment account for quite a large share of total unemployment, which makes it difficult to put people to work. The rate at which Estonia is catching up to the average productivity rate in the European Union must also increase significantly, and this is directly related to the need for an increased share of higher value added products and services both in the entire economic structure as well as among export articles.

The most ambitious objective can be considered to be the objective of increasing the share of Estonian exports in world trade, which would mean a significant change in export developments and in economic potential more broadly. Estonian export has been successful in the world economy in the past and the recovery from the recession has been very rapid, which allows us to presume that a similar trend could continue in the future as well, given that the necessary additional measures are implemented. It must be noted that the analysis is made somewhat more complicated in this aspect by the actual developments with regard to the speed of increasing trade volumes in the world economy.

## LONG-TERM ECONOMIC POLICY OBJECTIVES

The three primary groups of factors that impact GDP growth are: 1) demographic factors, 2) extent to which the workforce is utilized in the economy (largely described by the employment rate and the number of hours worked by people) and 3) hourly productivity. Estonia's GDP growth up to 2007 was impacted above all by changes in the number of employed people and the productivity of the workforce. The greatest influence on the GDP growth that preceded the crisis came from the continuous rise in productivity.

Estonia's future demographic trends are similar to the general trends in Europe. The population decrease in the 1990s has not yet impacted the percentage of the working-age population but a noteworthy impact will become evident in the coming years. The decrease in population will take place primarily in the working-age population (15-64-year-olds); and in 20 years, according to Eurostat estimates, Estonia will have more than 100,000 fewer working-age people. At the same time, the relatively high share of non-citizens sets clear limits on Estonia's possibilities to import labour, this being the route utilized by several other European Union member states to increase the size of the workforce.

**Table 2. Change in working-age population up to the year 2030**

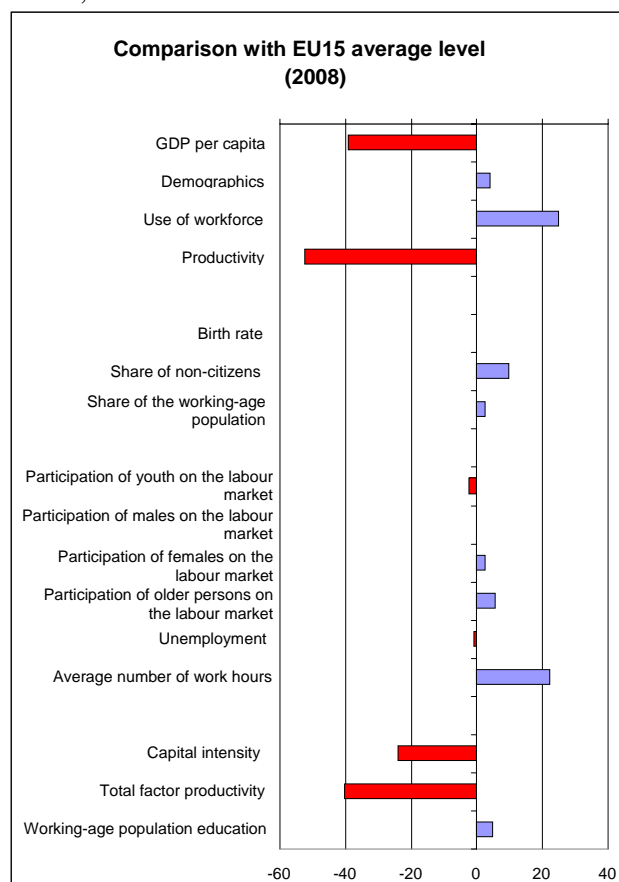
	Working-age population (15-64)	Decrease from 2010	Decrease in working-age population, %
2010	908 000		
2020	843 000	-65 000	-7 %
2030	801 000	-107 000	-12 %

*Source: Eurostat, European Commission's Ageing Report*

To maintain the economy at the current volume, there will be an increasing need for employees each year, as a result of which the **need for higher employment will grow in future**. This in turn will mean a need to increase the employment rate in regions of Estonia where the employment rate among adults is lower than the general Estonian average.

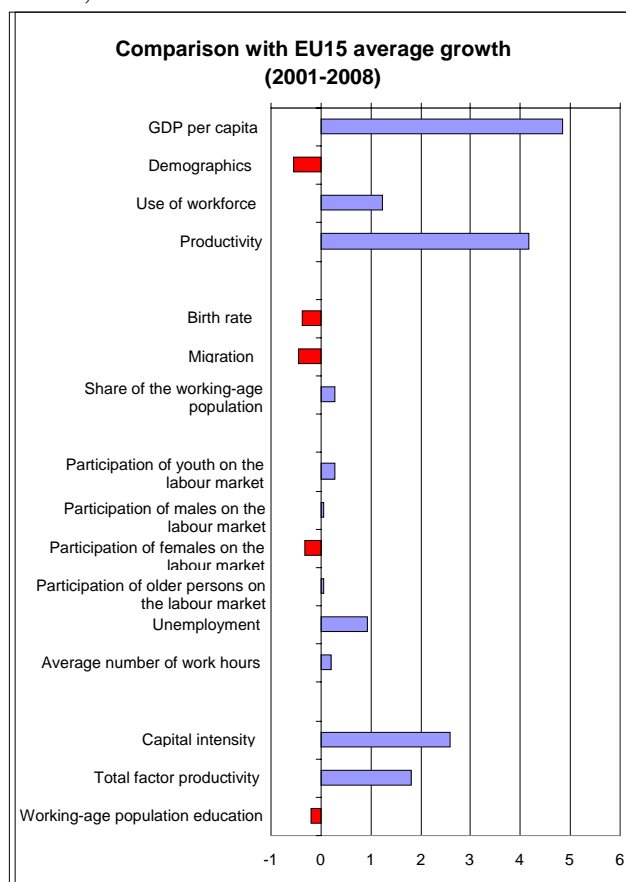
The employment level has dropped slightly below the European Union average after peaking in Estonia in the interim period. For this reason, in spite of the decreasing number of youth reaching working age, Estonia will find it possible to significantly increase the employment rate of the workforce already in the next few years. Current rising employment and, in the long term, the readiness of those 65 years of age and older to work should help soften the decrease in the working-age population. Based on the figure below it should be clear that **for affluence to grow in future significantly, the value added created by Estonian enterprises must grow, first and foremost**.

**Figure 2.** Comparison of the levels of components of the GDP of Estonia and the EU15, based on 2008 data<sup>1</sup>



Source: European Commission, Government Office

**Figure 3.** Comparison of the growth rate of components of the GDP of Estonia and the EU15, 2001-2008



Source: European Commission, Government Office

The average real growth in productivity in Estonia over the past 10 years has been faster than the average for Europe (even when we include the downturn in 2009). **At the same time, GDP per capita in comparison with the EU15 continues to be low, and the primary reason is relatively low productivity** (approximately one-half of the average for the EU15). The low level of productivity is related to both low total factor productivity<sup>2</sup> and capital intensity. In essence, this means that companies have invested little, that a great amount of human resources is expended, that they manufacture relatively inexpensive output and provide low value added services.

<sup>1</sup> The horizontal axis on the figures shows the difference in the level of the Estonian and EU15 average in percent. It is based on the data for 2008, as newer comparative data on the European Union member states are not yet available.

Demographics is an aggregate indicator based on three sub-components and shows to what extent population processes have impacted the size of the working-age population compared to the EU15 average.

Use of workforce shows how much work inhabitants of Estonia do. Among other things, it views the number of hours of work per employee.

<sup>2</sup> Total factor productivity is construed as all that takes place in internal processes of economic units (primarily companies). It is impacted to a great extent by the level of implementation of technology, economy of internal processes, effectiveness of everyday management etc.

The rapid decrease of the working-age population and an analysis of Estonia's GDP components show that regardless of their region or gender, the working-age population must be engaged to the maximum extent possible in high value-added enterprise.

Thus there are **two primary and central challenges in the context of Estonia's prospects for continued growth:**

- **to achieve rapid growth in productivity** through products and services with greater capital intensity and higher value added;
- **to return to the high employment level of the pre-crisis period .**

**The following objectives are set for 2020:**

<b>Increasing the employment rate in the 20-64 age group</b>		
<b>Current level 2010</b>	<b>Estonia's target 2015</b>	<b>Estonia's target 2020</b>
<b>66,4%</b>	<b>72%</b>	<b>76%</b>

Compared to the 2010 employment level and considering the declining population trend it will be necessary to bring **approximately 43,000 more people into the workforce** in order to attain the 76% objective<sup>3</sup>. To achieve the 2015 objective, approximately 38,000 people must join the workforce compared to the 2010.

<b>Increasing productivity per employed person compared to the European Union average</b>		
<b>Current level 2009</b>	<b>Estonia's target 2015</b>	<b>Estonia's target 2020</b>
<b>65%</b>	<b>73%</b>	<b>80%</b>

The precondition here is that the EU's productivity will grow by an average of over 1% a year and that Estonia's productivity per employed person will grow approximately two percentage points faster than the average EU indicator. Achieving the 2015 level will require real GDP growth of an average of 4.4% per year in the period from 2011-2015. In the period 2003-2010 the average real GDP growth per year was 3.2% and in the period from 2004-2010 labour productivity grew an average of 3% per year

To achieve these goals, the current policy must be continued and developed further for the purposes of raising the skills of employees, increasing the workforce, increasing the volumes of research and development in the private sector, developing infrastructure that supports enterprise on the international level and promoting foreign direct investment (especially in the fields with export potential and higher value added).

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<sup>3</sup> It also takes into consideration the fact that the generations leaving the labour market for retirement in this period are larger than the cohorts of new people entering the labour market.



## WELL EDUCATED PEOPLE AND INCLUSIVE SOCIETY

Under the education and integrated society field, the government policy focuses on the labour market, including actively involving all groups in society and offering qualified workforce and the quality and availability of education at all educational levels.

### ESTONIA 2020 OBJECTIVES

**The following primary objectives will be set for the year 2020 in the Estonia 2020 competitiveness strategy:**

<b>Reducing the share of early leavers from education, i.e. the percentage of young adults (18-24) with at most lower secondary education and not in further education or training</b>		
<b>Current level 2010</b>	<b>Estonia's target 2015</b>	<b>Estonia's target 2020</b>
<b>11.7%</b>	<b>11.0%</b>	<b>9.5%</b>

To achieve the goal, it will be necessary to completely implement ongoing policy changes that reduce the school dropout rate and to develop additional measures. Achieving this objective will reduce the number of people who discontinue their education by around 12,100 people compared to the 2009 level. Attaining the 2015 objective would mean that 8,500 fewer youths have discontinued their educational path compared to 2009.

<b>Increasing the tertiary educational attainment, age group 30-34</b>		
<b>Current level 2010</b>	<b>Estonia's target 2015</b>	<b>Estonia's target 2020</b>
<b>39.7%</b>	<b>40%</b>	<b>40%</b>

The goal was set on the assumption that in the long term, the primary priority of educational policy is raising the quality and international competitiveness of higher education, as well as increasing the number of student places commissioned by the state. The percentage of people with tertiary education in Estonia has seen stable growth in the past five years. Compared to the 35.7% level in 2009, 2010 saw great growth, as the number of higher school graduates has grown tremendously since 2000 (the so-called higher education boom). Fulfilling the objective will be supported by the “back to school” project launched in 2010.

<b>Reducing the at-risk-of-poverty rate after social transfers</b>		
<b>Current level 2010<sup>4</sup></b>	<b>Estonia's target 2015</b>	<b>Estonia's target 2020</b>
<b>17.5%</b>	<b>16.5%</b>	<b>15%</b>

In 2009, the at-risk-of-poverty rate after social transfers stood at 15.8%, which is the lowest it has been in recent years. A reduction in the at-risk-of-poverty rate was caused by the drop in the at-risk-of-poverty threshold. At the same time the income level decreased, the social protection benefits retained at the same level, and the pensions rose 5%. As 2009 was an exceptional year when it came to the recession and decrease in employment, the data for 2010 are used as a basis for setting objectives – a year in which the forecast relative poverty rate would be 17.5. The forecasted increase in the at-risk-of-poverty rate is due to an increase in the poverty level, which is the result of a continued increase in employment and incomes.

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<sup>4</sup> Government Office forecast

The unemployed and those over 65 and living alone have always faced the greatest risk of poverty. In 2009, about 42,000 pension-age people emerged from relative poverty on the backdrop of somewhat of a rise in pensions and general drop in incomes. In the Estonia 2020 strategy, Estonia set as its objective to decrease the at-risk-of-poverty rate primarily through increasing employment and increasing the general educational level. For Estonia, it is important to reduce the at-risk-of-poverty rate after social transfers to 16.5% by 2015 and to 15% by 2020.

<b>Increasing the participation rate in lifelong learning among adults (25-64).</b>		
<b>Current level 2010</b>	<b>Estonia's target 2015</b>	<b>Estonia's target 2020</b>
<b>10.9%</b>	<b>15%</b>	<b>20%</b>

In the years 2001-2006, the participation of Estonian adults in lifelong learning ranged between 4-7%. A breakthrough took place in 2008 and the Estonian indicator exceeded the EU average level. In 2009, the adults participation rate in lifelong learning was 10.6%; it had risen to over 10.9% in 2010. The government has set the goal of reaching the level of 15% of adult participation rate by 2015. By 2020, Estonia's objective is to increase the lifelong learning participation rate to 20%.

The prerequisite for achieving this objective is that additional substantive and financial measures need to be implemented for increasing the adult participation rate in lifelong learning. The emphasize will be put on measures such as broadening the opportunities for adults to take part in the training and retraining measures, increasing the financing of adult training measures and offering vocational education to adults who lack professional education.

<b>Reducing the share of adults (25-64) without any professional education or vocational training</b>		
<b>Current level 2010</b>	<b>Estonia's target 2015</b>	<b>Estonia's target 2020</b>
<b>32%</b>	<b>32%</b>	<b>30%</b>

A large percentage of Estonia's workforce (age group 25-64) has a basic or general secondary education only and does not hold a professional education (vocational or higher education). The number of people who lack a professional education is highest in the youngest age group, among those 25-34 years of age – 35% in 2010.

The goal was set taking into consideration ongoing measures for providing opportunities for acquiring a degree to those who discontinued their education. It as also planned to implement additional measures that must be implemented in the years ahead to increase the share of adults with professional education.

<b>Reducing the long-term unemployment rate</b>		
<b>Current level 2010</b>	<b>Estonia's target 2015</b>	<b>Estonia's target 2020</b>
<b>7.7%</b>	<b>4%</b>	<b>2.5%</b>

Due to the decrease in the total number of jobs caused by the economic recession, the share of the long-term unemployed in the workforce has gone through a major increase. In the years ahead, it is expected that the overall employment rate will increase, as a result of which, forecasts state, the long-term unemployment rate will start decreasing. To fulfil the set objective, it will be necessary to take more effective the measures aimed at activating the unemployed and to increase the impact of active labour market policy.

Decreasing the youth unemployment rate (age group 15-24)		
Current level 2010	Estonia's target 2015	Estonia's target 2020
32.9%	15%	10%

During the economic recession, unemployment has increased more rapidly than average among youth, reaching 32.9% in 2010. Yet youth unemployment has started to decrease according to the data from recent quarters. The goal is to bring the youth unemployment down to at least the pre-crisis level. To do so, it is planned to implement additional measures specially aimed at the younger generation. It is expected that provision of a high-quality education and measures designed to combat dropping-out from school will have the combined effect of ensuring that youth are better prepared to enter the labour market.

Increasing the labour participation rate (age group 15-64)		
Current level 2010	Estonia's target 2015	Estonia's target 2020
73.4%	74%	75%

In spite of unemployment, which increased during the economic crisis, people's economic activity and the workforce participation rate have remained relatively stable in recent years. A positive trend is that part of the increase in unemployment was caused by a drop in the non-active population and the fact that people who were previously away from the labour market have started looking for work. The goal was set considering the forecasted rate of recovery of the economy and the labour market as well as the decrease in the workforce due to demographic trends.

## PRIORITIES OF GOVERNMENT POLICY

### Quality, availability and effectiveness of education

#### 1. Improving the quality of the educational system and adapting it to demographic changes.

The decrease in the number of students due to demographic changes has the greatest impact on the upper secondary school network followed by higher educational institutions. The number of basic schools and vocational educational institutions has decreased in recent years and thus adaptation to demographic developments has to a significant extent taken place. **To ensure balance between the quality and availability of general education**, basic education should be available as close to home as possible while upper secondary school level studies on the other hand should be available in larger county population centres.

The number of higher educational institutions has also decreased and due to the establishment of stricter quality requirements, the trend may continue. The goal in higher education is to attain a situation by the beginning of 2012 where all the higher educational institutions in Estonia have the right to issue nationally recognized diplomas. **The division of labour and competences between higher educational institutions** is one of the most major higher educational system objectives. In the long-term perspective, the new institutional accreditation procedures to be adopted in 2011 will contribute to a clearer differentiation between educational institutions. It will require educational institutions to more clearly define their role in Estonian society and promote specific areas accordingly.

Compared to other EU countries, a relatively small percentage of basic school graduates in Estonia proceeds to study in vocational education. Besides the preferences of the students themselves, the different system for planning student places in upper secondary school and vocational education plays a role in this regard. Under the current system, the planning of post-basic-school student places takes place in 226 local governments (opening upper secondary schools' class sets which can be done without any restrictions); in the case of vocational education, the planning takes place at the Ministry of Education and Research (for the purposes of 30 state, 3 municipal and several private vocational educational institutions). State-commissioned student places in vocational education and higher education are planned separately, often without taking into account the actual need for specialists according to different groups of professions and educational levels. As a result, the ratio of vocational education to upper secondary school studies has reached 26:74, which does not conform to the needs of the current labour market. The key to resolving the situation is **to treat basic school and upper secondary school as different at the level of objectives, and to engage in comprehensive planning of student places at the vocational education and upper secondary school levels**. This would ensure that strong basic schools near people's homes would continue to exist. It would also shape a broader consensus that after graduating from basic school, all students should make their primary choice with regard to continuing their educational path and planning their career. Here career studies and career counselling play a major role, allowing everyone to make a rational choice in line with their abilities and labour market needs. Parents' attitudes also play an important role in what educational path young people choose.

A decrease in the number of upper secondary school graduates results in lower admissions figures in bachelor's and professional higher education as well as in postsecondary vocational education. For higher educational institutions, this means that opportunities for lifelong learning become more important on the master's degree level as well as a decrease in the number of curricula in the first level of study (bachelor's studies, professional higher education).

To allow young people to adapt better to later working life, general education needs to not only instil knowledge about facts but **to shape students' social key competences, and to develop creativity and entrepreneurship**. It is important to create for schools specific (monetary) incentives to shape students' key competences. **Teacher training must ensure the ability to fulfil the general goals of the curriculum and to shape students' key competences. The teachers' salary system must promote initiative, creativity and professional development of the teachers.**

The level of financing general education has remained unchanged despite the fact that student numbers have been decreasing consistently. For this reason, the per-student financing of vocational education with respect to general education has decreased, and the expenses per student in general education are higher than they are in vocational education. Also, the share of financing tertiary education in Estonia is low among the OECD countries compared to general spending on education. With regard to financing education, the **proportions of financing different types of education should be reviewed and more emphasis must be placed on effectiveness**.

In planning structural funds for the subsequent periods, it should be borne in mind that infrastructure investments will decrease, because a large part of the infrastructure has already been created or renovated. This allows more funding to be directed toward substantive

developments in the educational system. It should also be borne in mind that the fixed costs of maintaining the new infrastructure will put added strain on the budget.

Due to internationalization, in coming years more emphasis will have to be placed on organizing education for children with an immigrant background, based on the objectives of integration. It will be important to take into consideration the ethnicity of the new immigrants and increase in the cultural diversity. **The availability of an international general education is the prerequisite for highly qualified workers coming to Estonia to work.**

The most important reforms planned in this field are optimizing the network of general educational schools and more clearly separating basic schools and upper secondary schools, fully implementing the basic school and upper secondary school state curricula, increasing the quality of vocational education and its' conformity to the labour market needs, and expanding the possibilities afforded by international general education (including implementation of IBO curricula) in Tallinn and Tartu and creating an European school.

## **2. Bringing labour qualification into conformity with the needs of the contemporary labour market (among other things, making better use of the opportunities of EU internal market policy and other policies) and increasing the share of people with professional education at the vocational or higher educational level.**

A total of 32% of Estonia's workforce has a basic or general secondary education and does not hold a professional education (vocational and higher education). By age group, the problem is greatest in the youngest age group (25-34-year-olds), where the share of people who lack professional education is the highest (35%) and when we view data for a long period, we see that a slight decrease has taken place only in the last couple of years.

At the same time, the new jobs that arise with changes in economic structure will require employees to have a higher educational level and up-to-date skills. To better integrate the needs of the labour market and people's skills, as well as to increase the productivity of the workforce, it will be necessary to ensure that there is an ample future supply of employees with up-to-date skills. For this purpose, it is above all necessary to **increase the share of the working-age population with professional education (i.e. vocational or higher education).**

People with skills and an education that matches the labour market needs stand a better chance of finding a job, which in turn prevents high and long-term unemployment from developing. Thus, it is important that the structure of the educational system by various types of education conform to the needs of the labour market stemming from the economic structure.

A major reason for the large share of people without professional education in the case of younger people is the fact that they prefer general secondary education to vocational education and that many drop out of school.

The quality and competitiveness of human resources are impacted by students dropping out at all educational levels. The dropout phenomenon is the most noteworthy in the third stage of study of basic school and in the first year of upper secondary school and vocational studies, which is a sign that the academic process and environment do not support the development of every student in line with their abilities. Thus special attention and support must be devoted to

## **implementing the new state basic school and upper secondary school curricula and the new Basic Schools and Upper Secondary Schools Act.**

The higher dropout rate at vocational and higher educational institutions can be correlated with students' low level of knowledge about the working life and lack of learning skills, which often leads them to make the wrong professional choices, which in turn causes them later to discontinue studies. For this reason, it will be important to **continue to develop career education and other career services, and to increase the availability of such services** with the purpose of better supporting students' educational and career choices.

High-quality pre-school education is important to ensure that all children are equally prepared for entering school. We need to devote more attention to early **discovery of children's talents and abilities, stimulating their minds and promoting their development**. This will help students create associations between different fields and the knowledge of subjects needed for working in such fields, which in turn will lead to greater motivation to learn.

The planned reforms focus on creating opportunities for young people with a basic education to acquire a professional education, significantly increasing the opportunities for adults in participating in training and re-training measures, and increasing the availability of career services and career counselling.

### **3. Increasing the international competitiveness of higher education.**

Estonian universities and higher educational institutions compete on the global higher education market, where there is stiff competition for talents. Along with the increase in economic well-being, more young Estonians are studying at universities abroad, and they primarily favour Finnish, German and British institutions of higher education. Promoting student mobility in the interests of obtaining a more diverse education is of key importance. The **supply of competitive higher education** must also be ensured, above all in Estonia. A total of 3% of today's university students spend some time studying abroad. The target set in the European Higher Education Area is for 20% of graduates to have mobility experience by 2020.

According to projections, the number of students at the first stage of higher education will decrease by around 5% a year in the near future. In connection with changes in the demographic situation, it will be possible to increase admissions to master's and doctorate programmes, taking into consideration quality and the need to retain critical mass in higher education and in fields that are critical to Estonia, as well as maintaining a rational division of study areas between institutions of higher education.

Supporting internationalization of higher education serves three primary purposes. It creates an opportunity for Estonian students in higher education to widen their horizons, obtain experience studying and living in a different cultural environment and creating contacts, all of which are important components in later working life in an increasingly global world. Also important is "internationalizing at home" – attracting **talents to areas that are important for the Estonian economy** or becoming more active in hiring foreign faculty members to work at Estonian institutions of higher education to give Estonian students who are unable to study abroad an opportunity for contacts with an international environment. Foreign students who leave the country after their studies are also important for Estonian society. They may become "ambassadors" for the Estonian state, culture and economy in their own country, who can contribute to developments in Estonia through their contacts. Thirdly, we should take into

consideration that competition and quality in higher education and the academic sphere in general are international. An international comparison is the basis for the quality standard and international mobility creates opportunities for recruiting better employees.

The internationalization of higher education encompasses both the mobility programmes aimed at Estonian students and faculty as well as measures for encouraging foreign students and faculty to come to Estonia. Thanks to the special measures implemented, admissions of foreign students to Estonian universities have increased in recent years. Continuing the current activities, the goal for 2015 – to admit 2,000 foreign students – is attainable. To do so, it will be necessary to continue to further develop the existing measures and **to make Estonian higher education more attractive to foreign students**. Besides acquiring an education, it will be important to create more possibilities for foreign students **to stay in Estonia to work after graduating from university**.

The more active influx of foreign students and faculty is hindered by the current procedures for obtaining visas and work permits, which is relatively slow. There is limited opportunity for family members to accompany applicants and this privilege currently extends only to prospective university students at the Ph.D. level. In addition, the Aliens Act currently in force is interpreted differently in different Estonian foreign representations as well as those of countries representing Estonia. Thus it will be **necessary to revise the current procedures for giving work permits with the objective of making it easier for potential top-level specialists and highly qualified employees to enter the Estonian labour market**.

In the field of higher education, the objective is to significantly increase the number of state-funded student places and to raise the quality of higher education through greater internationalization.

**Primary reforms to be carried out during the year (commitments for Euro Plus pact):**

**1) Carrying out higher educational reform.**

As a result of this reform, quality will become the overarching objective in the higher education system. In 2011, the number of state-funded student places at public universities or institutions of professional higher education for 2012-2014 will be increased, thereby ensuring tuition-free studies for up to 12,500 university students who meet the admission requirements in curricula with Estonian as the language of instruction, for acquiring a diploma in one field during the standard period of study. To increase the quality of academic work and to better bring the educational system's outputs into conformity with economic needs, the structure of the state-funded student places will be reviewed and changed with more attention devoted to the educating the specialists necessary for increasing competitiveness (e.g. in IT).

**2) Exemption from fringe benefit tax on work related studies.**

As a result of this change, expenses on degree level education related to employees' work will no longer be viewed as a fringe benefit. The reform will promote investments by companies into raising employees' qualification and thereby support increase in productivity and general competitiveness.

## Labour supply

### 4. Increasing the impact of active labour market policy and sustainability of financing

The merger between the Unemployment Insurance Fund and the Labour Market Board has led to positive outcomes in better management of service provision; however, given the large number of the unemployed, the Unemployment Insurance Fund should significantly increase the **effectiveness and impact of active labour market measures**. Due to the rapid growth of unemployment, the share of the unemployed participating in active labour market measures is still low.

Despite the decreasing unemployment in the recent quarters, there is the risk that the number of long-term unemployed will increase and that relatively high unemployment will persist for a longer period. Thus, in the coming years, more attention will have to be paid to preventing and reducing **long-term unemployment and unemployment among young people**. Better cooperation with local government institutions plays a significant role here (activation measures, resolution of social problems etc).

**It will be important to tighten the institutional cooperation** and more clearly define the responsibilities of the Ministry of Education and Research, the Ministry of Social Affairs, the Unemployment Insurance Fund and local governments in reducing and preventing the unemployment. Opportunities must be created to allow unemployed who lack professional education to acquire qualifications in the degree level study. As to unemployed people who hold primary qualifications, they must be provided with additional opportunities to acquire higher or supplementary qualifications that would markedly increase their future competitiveness on the labour market.

**It will be necessary to reinforce, in practice, the link between provision of active labour market measures and the benefits/allowances disbursed to people.** The principle that receiving benefits entails obligations for the recipient to actively search for a job needs to be implemented into practice more clearly. To evaluate whether the active labour market policy is having the desired effect, it will be necessary to implement a systematic monitoring and evaluation system for assessing the impact of active labour market services.

In regard to the ageing workforce, **it will be necessary in future to create special measures for helping older people to return to the labour market** and to facilitate their working life. It is also important to deal more with unemployment prevention as it is significantly more costly and complicated to eliminate the consequences of unemployment.

An amendment to legislation entered into force in 2011 that allows the unemployment insurance premiums to be partly used to cover provision of active labour market measures. Thus three financial sources can be used to finance active labour market measures: the state budget, structural funds and revenue from unemployment insurance premiums. Combining these sources of financing requires that the **effectiveness and sustainability of financing for active labour market policy be ensured**.

In the years ahead, it will be important to increase the impact of active labour market measures through closer cooperation between state and local government. Another goal is to make the service provision by the Unemployment Insurance Fund more effective and to create special programmes for increasing employment of youth and disabled people.



## 5. Increasing healthy life expectancy by improving health-related behaviour and continuing to work toward reducing accidents.

**Poor health-related behaviour, related illnesses and premature mortality among the working-age population leads to a significant loss of human resources.** In the case of premature mortality, a major role is played by behaviour that jeopardizes the health (e.g. use of alcohol, disregard for hazards, low level of physical activity, smoking, eating an unbalanced diet) which is an important for continuing to extend life expectancy. The primary cause of death in Estonia over the years has been heart and circulatory diseases, neoplasms and injuries.

People's positive health behaviour is most impacted by the comprehensive provision of different measures, including increasing people's awareness, establishing regulations that provide restrictions and incentives as well as an effective enforcement mechanism. This approach has been successful in recent years in such as fields as traffic safety, leading to a significant drop in the number of traffic accident fatalities.

Another key reform was introducing health awareness, traffic safety and risk avoidance topics into basic school and upper secondary school curricula in early 2010. The new human studies syllabus will become effective at the first stage of study in autumn 2011, in the second stage of study in 2012 and in the third stage of study in autumn 2013. Health and safety is an overarching topic in the upper secondary school curriculum as well.

In the coming years, it will be important to direct resources at improving health-related behaviour among the working age population as well as prevention of injuries and fatal accidents due to injury. It is planned to implement an **interministerial injury death prevention policy** and to continue the **development of light-vehicle roads** to ensure traffic safety. It is also planned to develop **recreational sites that support sports and an active lifestyle**.

To reduce on-the-job accidents and ensure a working environment supportive of good health, it is necessary to continue efforts to **establish an occupational accident and disease insurance system**. Negotiations with organizations representing unions and employers have been under way for many years, but the creation of a new type of insurance temporarily fell by the wayside due to the recession.

It is also planned to increase the amount of **various health monitoring and screening programmes (such as for cancer)** to ensure that diseases and serious health problems are detected as early as possible and treatment can be started.

### Primary reforms to be carried out during the year (commitments for Euro Plus pact):

#### 1) Adopting draft legislation to reduce the individual income tax rate effective in 2015.

The goal of the reform is to reduce the tax burden on the workforce in line with the objectives of the Euro Plus pact. Effective 2015, the income tax rate established in the Income Tax Act will be decreased by one percentage point – to 20%.

## COMPETITIVE BUSINESS ENVIRONMENT

The field encompasses a number of major subsectors such as research and development, innovation policy, enterprise and enterprisingness and the development of a legal environment and public infrastructure (above all transport connections) that are favourable for enterprises.

### ESTONIA 2020 OBJECTIVES

The following objectives have been set for 2020:

<b>Raising the level of investments into research and development</b>		
<b>Current level 2009</b>	<b>Estonia's target 2015</b>	<b>Estonia's target 2020</b>
<b>1,42%</b>	<b>2%</b>	<b>3%</b>

Based on previous experience, the goals set and the latest economic forecasts, this would mean around 0.8 billion euros in R&D spending in 2020 – a quadrupling of R&D spending compared to 2009, assuming that the GDP in nominal value would be close to twice as large as before.

The average annual increase in Estonia's funding for R&D activity from 2000-2009 was 10.1%, which was the highest figure in the European Union. Due to the initially low benchmark, growth was especially rapid in precisely the private sector – an average of 18.4% per year. During the economic crisis, the government set a goal of increasing planned public sector investments in a greater than planned amount (reaching 1.2% of GDP by 2011), to establish a good basis for private sector R&D investment growth, which would accelerate when economic recovery started.

<b>Increasing the share of Estonian export in world trade</b>		
<b>Current level 2009</b>	<b>Estonia's target 2015</b>	<b>Estonia's target 2020</b>
<b>0.085%</b>	<b>0.100%</b>	<b>0.110%</b>

In past years, the growth of the market share of Estonian export as a percentage of total world export of goods and services took place at a time when world trade was growing rapidly. In light of the economic growth forecast, raising export volumes would mean a separate goal of increasing the share of export beyond 120% Estonian GDP, which would presume an export volume of over 30 million euros per year in 2020. The precondition for attaining the goals is that Estonia's export volumes must grow at a rate 2-3 percentage points more than the world average for economic growth.

<b>Increase in workforce unit costs<sup>5</sup> does not significantly exceed the growth rate of productivity</b>		
<b>Current level 2010</b>	<b>Estonia's target 2015</b>	<b>Estonia's target 2020</b>
<b>-12%<sup>6</sup></b>	<b>5%</b>	<b>5%</b>

The growth rate of workforce expenses in the boom years of the previous economic cycle outstripped the growth of productivity. After the recession, the volumes of work increased both in the industrial sector as well as in most service branches, due to which sales revenues grew and profitability recovered. There was a significant impact on companies' operating costs, above all on cuts in workforce expenses, accompanied by growth in effectiveness and an increase in competitiveness. As a result, the imbalances in internal demand that occurred

<sup>5</sup> Nominal workforce unit cost, ratio of expenses on wages and salaries to value added generated per employee

<sup>6</sup> In 2011, growth is projected once again to increase to above 5%, then stabilize.

during the boom have abated, the growth of labour productivity now outstrip the growth in average wage, helping reduce the discord, which will be important to monitor in coming years as pressure on wages will presumably rise.

## PRIORITIES OF GOVERNMENT POLICY

### 6. Shaping a policy that promotes long-term growth in the international competitiveness of companies.

The challenges with regard to the business environment in the medium-long range perspective will not change significantly. **Starting a business, internationalization, innovation and cooperation continue to serve as the framework in which developments could take place.** Still the **most important** for Estonia is **to ensure growth of productivity and improve access to capital for entrepreneurs.** Financing topics will become more urgent in connection with limited resources: it would be necessary to have **more accurately targeted and effective measures** that could be implemented in as simple manner as possible with maximum leverage. In other words, subsidization policy should move in the direction of financial instruments, as this way, a greater number of companies could be supported using the same resource outlay and companies would have greater incentive to make more effective use of opportunities for subsidies. If the number of direct subsidies decreased, they would likely be used to support larger risks or projects with a longer payback period. **Issues related to availability of suitable workforce** also remain central. These issues pose a challenge first and foremost to the adaptive ability of the education system. The growth of competitiveness of the business environment could be promoted mainly with **regulatory stability**, leaving room for changes that serve purposes of modernizing the environment (including expanding and deepening the European internal market). **Companies' export needs more lasting state support** in the broadest sense i.e. what is needed is for direct subsidy measures to continue to help undertakings start out on the export market with lower expenses based on high-quality consultation input.

The Estonian business environment is considered to be advantageous in comparison with other countries. Yet more specific challenges must still be addressed. With regard to the regulatory environment, **we need changes in legislation for stimulating the implementation of priority policies in the context of economic development.** There must also be efforts to perform **systematic assessment and decrease the administrative burden** must also continue to be dealt with. **Maintaining the stability of the taxation environment encourage** entrepreneurs to invest into developing their business.

As more important measures for responding to the challenges, a **financial instrument must be created to support manufactures' technology investments, a system for assessing the impacts of entrepreneurial subsidies must be developed** and **entrepreneurial subsidies must be consolidated**, continuing measures **aimed at supporting export and developing cooperation**, offering state support for entrepreneurs heading to international markets through **more effective use of foreign representations** and **establishing demo centres** for target markets.

### 7. Creating an environment for bringing to Estonia foreign direct investments aimed at sectors with greater export potential and higher value added than currently.

Continuing to ensure the growth of the level of foreign investments into Estonia and developing Estonian export depends on ensuring the **availability of qualified workforce.**

There is a lack of both skilled workers – needed by domestic and foreign-owned companies – and people who would be capable of ensuring that entrepreneurs are successful on export markets. To draw foreign investors, they should be offered **attractive benefits that would be competitive in international comparison**. It would also be necessary **to develop support measures aimed at serving foreign investors**. **Estonia's general reputation and the social environment** should also gradually become **success factors** in attracting new foreign investments. Foreign investments with a high added value take on key **impact on the shaping of supply chains** and thereby can open new **export opportunities for Estonian entrepreneurs**. Such foreign investments also promote the **transfer of knowledge and skills** and research and development intensive investments contribute to improving competences in the field in the broader sense.

There are definite arguments that are important for different foreign investors in making an investment decision. **Estonia** is actively competing with other countries to attract foreign investments, tending **to position** itself as a **destination country for foreign investments that create higher value added and promote supply chains**. To retain and develop Estonia's competitiveness in attracting foreign investments, it will be key to implement a strategy for the development of a comprehensive **investment environment that makes Estonia stand out in a positive sense**.

**The measure for supporting major investors** that stimulate supply chains must be continued, along with the measure for **developing local government infrastructure**, the **capability of county development centres and local governments** to deal with regional investor service must be raised, **English-language information materials** must be created for **promoting hiring of workforce** and the use of [www.eesti.ee](http://www.eesti.ee) as a single contact **must be simplified**. It is also important to **develop** a comprehensive **talent programme** and **improve the availability of foreign-language education in Estonia**.

#### **8. Creating preconditions for increasing the volumes of research and development in the private sector and raising the number and quality of innovation outputs.**

Estonia is below average with regard to companies' research and development investments and is also behind on its own strategic objectives. The primary **challenge** that lies ahead **is to increase companies' innovation capability**. To do so, **research, development and innovation of companies operating in Estonia must be promoted**, but attention must also be devoted to bringing **knowledge- and development- intensive foreign investments** to Estonia. It will be important to **provide systematic support for young, innovative enterprises**.

We need a critical mass of vital development both in R&D and innovation "production" as well as for ensuring financial mechanisms to support young and innovative enterprises. **Increasing demand for R&D&I outputs** has key importance, but this cannot take place solely by implementing one or two measures, it requires a full solution that would take into account the processes in the field from start to finish, in other words, from studies and experiments all the way up to the marketing of a finished solution. To create synergy, **mobility of knowledge and skills should be supported** and the **attractiveness of Estonia as a place to live should be improved**. It will be necessary to **support and ensure the access of Estonian companies to the global venture capital market**.

**Public sector R&D capability**, including on the university level, and effectiveness play a key role in companies' research and development capability and state or regional competitiveness indicators. Public sector R&D activity creates the necessary human resources for enterprise and provides access to modern infrastructure as well. The academic environment is a key connecting link between domestic and international networking of people and knowledge, which is one source for raising the innovation capacity of companies and attaining higher value added. In future, R&D&I will depend more on developments in the EU and on Estonia's **capacity to contribute to international cooperation, including in the framework of the European research area**.

As necessary measures, a **manufacturing management, design, IT and intellectual property audit** measure must be implemented, and **public procurement regulations should be reviewed and if necessary transformed** into an engine of development in fields important to the state (innovation, sustainability, design, creative industries, space technologies). The need for changing the **incubator financing mechanism** must be analyzed, **the R&D performance assessment methodology**, and a measure promoting **use of R&D infrastructure** must be created. New measures that must be launched are **financial instruments for offering venture capital** to start-ups, **innovation control mechanisms for conforming to socioeconomic challenges** and **cooperation between clusters and CDCs** must be made more effective, and on the international level as well.

#### **9. The broader use of the potential of the creative industries, ICT and other key technologies for raising the value added of other sectors.**

For greater use of the potential of the creative industries, ICT and key technologies in future, it will be necessary **to promote activities that integrate the fields of training and internationalization as well as in financing**. To create additional value added from synergy between fields, attention should be devoted to **increasing the capability of human capital** in the broadest sense. Creating successful cooperation platforms requires the **existence of a favourable environment** and people that are able to take into consideration sectoral particularities. Use of ICT and other key technologies as horizontal fields **for improving processes in other fields** or for creating new initiatives **will require development strategies aimed** at advancing to a new level.

Measures that must be developed include an **export measure** aimed at creative industries entrepreneurs, **a measure for supporting participation** of creative industries entrepreneurs **in foreign competitions**; create **development environments**; measures for **promoting cooperation between entrepreneurs, creative personnel and ICT people**, activities for providing content for the **creative industries entrepreneurs development programme**. Support must be provided for the creation of a **professional qualification system of associations** representing sub-sectors in the creative industries. Creating **ICT roadmaps** for greater integration of focus fields and a **measure for developing service sector`s enterprises**.

#### **10. Developing human resources engaged in research and ensuring a future supply of engineers and top-level specialists.**

The new generation of researchers and top-level specialists depends largely on those who have entered Ph.D. studies and the number of graduates. To this point, an obstacle to increasing the appeal of Ph.D. programmes has been the low level of social benefits offered to doctoral students. The new Research and Development Organization Act makes it possible

starting in 2012 to sign Ph.D. students to an employment contract that is accompanied by the same social guarantees as in the case of any other contractual employment relationship. This will make doctoral studies more attractive and increases the number of those who have defended a doctorate, as the increased sense of security promotes dedication to research. In addition, the legislative amendment is an important step toward creating a young researcher's career system. For this reason, the complete implementation of the legislation is of key importance. In addition, it will be necessary **to implement additional measures for increasing the numbers of Ph.D. students and successful completion of their studies**. For faster graduation of Ph.D. students, it will be necessary to continue to support the activities of doctoral schools and centres of excellence in research.

The budget allocated as part of state-commissioned student places does not currently cover the actual costs per student place in doctoral study. Thus it is important **to review the cost of a student place, devoting greater attention to performance of education and effectiveness of state-commissioned student places**. Secondly it is **necessary to ensure that state-funded education would be aimed at fields of key importance to the Estonian economy** and areas where there is a need for top-level specialists. More effort should be invested in fields where competitiveness results can already be seen and which are important for the development of a higher value-added generating and knowledge-intensive economy.

The system for supervision of research papers in universities must be developed and the number of capable supervisors must be increased. One potential seedbed for supervisors could be study groups created in Estonia in which international faculty members participate. These would serve to consolidate competences. It is also important **to promote the mobility of teachers within Estonia between different institutions of higher education and for short periods at institutions of higher education abroad**. It is important to put value on effective supervision, where the supervisor would support graduation of PhD students and be motivated for performing high-quality supervision work through recognition and career.

## **11. Bringing transportation, ICT and other public infrastructure and institutions that support business to an international level.**

Due to Estonia's location and settlement patterns, it is very important for the living and business environment that there are **connection possibilities, both cross-border and domestically, on a competitive level**. In developing local industry and services, the availability of public services in the case of well-functioning transport and information exchange infrastructure should not depend on the particularities of the location. Based on the movement patterns of the workforce, the **better interoperability of transport and connection points** requires special attention. It will be necessary to harmonize travel schedules in order to ensure the ease of use of public transport, and to create the corresponding infrastructure that will allow passengers and goods to move from one type of transport to another and in the long term, use **integrated planning to enable selection from among various transport type alternatives**. One output will be planning of use of funds in the EU's new financial perspective, in which stronger direction at the government level must be preferred to "bottom-up" competition.

In international comparison, the level of transport infrastructure has been relatively weak for Estonia, especially as regards the level of cross-border connecting routes, above all due to the cost of the investments and economic unprofitability, stemming from low population density and low number of potential users. For the same reason, the development of ICT

infrastructure at a contemporary level to cover the entire country will not be possible without state support. However, for Estonia, in terms of development as business, scientific, cultural or educational environment and internationalization, these are key preconditions – and currently, limitations. Thus it will be important **to devote more attention to international connections, especially direct flights and cross-border railways and roads.** In the interests of balanced regional development, it will be necessary to continue developing not only international highways but dust-free surfaces for state secondary roads, to lay preparations for **linking public transport systems** and to continue establishing **quality high-speed Internet coverage.**

To do so, investments will continue into extending airport runways, into expanding terminals and improving the quality of equipment. Road construction requirements will be brought up to date and the safety and convenience of connection points between different types of transport will be increased. The large-scale project to cover all of Estonia with broadband Internet access will also continue.

**Primary reforms to be carried out during the year (commitments for Euro Plus pact):**

**1) Launching a start-up programme for supporting the establishment of innovative enterprises.**

The Start-up Estonia program will be developed and enforced to support the birth of new innovative and ambitious enterprises. Program has a budget of 3.7 million euro aiming to encourage commercialization of students' and researchers' business ideas through creating better ways to access capital and develop an international network.

## ENVIRONMENTALLY SUSTAINABLE ECONOMY AND ENERGY SECTOR

The field of environmentally sustainable economy encompasses development of the Estonian energy sector, energy efficiency in various sectors and general resource efficiency objectives.

### ESTONIA 2020 OBJECTIVES

The following objectives have been set for 2020:

Level of greenhouse gas emissions compared to the 2005 level <sup>7</sup>		
2005 level	Estonia's target 2015	Estonia's target 2020
6227 thousand tons	6356 thousand tons	6912 thousand tons (+11% compared to 2005)

*\* The current level of emissions – the actual point of departure for attaining the target – is an estimated 5690 thousand tons (average level of emissions 2008-2010)*

Greenhouse gas emissions in Estonia have been reduced significantly in the last decades. Whereas the estimated emissions of greenhouse gases in 1990 expressed in carbon dioxide equivalent were about 41,053 thousand tons, in 2009 there were 16,836 thousand tons of emissions (not including the LULUCF sector<sup>8</sup>), which means a decrease of about 60%.

The EU has set the goal of reducing emissions by 20% compared to the 1990 emissions level by the year 2020. The emissions reduction will be achieved by combining two mechanisms – the EU's emissions trading system and national targets for sectors outside the trading system. From 2013, the EU emissions trading system will be launched on a new and uniform basis and auctions will become the main permissible means for distributing emissions units; only under certain conditions will units be distributed for free. The EU has set the goal of reducing greenhouse gas emissions through the trading system by 21% compared to the 2005 level of emissions. National targets have been set for sectors that are not part of the trading system (buildings, transport, agriculture, waste etc) where Estonia's emissions should not increase more than 11% by 2020 compared to the 2005 level. The national targets and the EU trading system combined should result in a 20% reduction in the EU's emissions compared to the 1990 level.

Increasing the share of renewable energy to 25% of final consumption of energy		
Current level 2009	Estonia's target 2015	Estonia's target 2020
19,5%	23,6%	25%

Estonia's goal is to increase renewable energy to 25% of final consumption of energy by 2020, which will require changes in all sectors. The share of renewable energy will likely increase through growing production of wind energy. Use of wood will also contribute to the goal. A 2007 amendment to the Electricity Markets Act established a support scheme for producing renewable energy in Estonia, which has strongly increased the share of renewable energy in recent years. With the support measure continuing it can be said that the target set for Estonia is attainable and it is likely that there is enough potential to achieve the higher objective as well.

<sup>7</sup> The objective will come into effect for sectors outside the EU emissions trading system.

<sup>8</sup> Land use, changes in land use and forestry



<b>Preserving the level of final energy consumption at the 2010 level</b>		
<b>2010 level<sup>9</sup></b>	<b>Estonia's target 2015</b>	<b>Estonia's target 2020</b>
<b>2866 ktoe</b>	<b>2938-2986 ktoe (forecast -4%)</b>	<b>2866 Mtoe (forecast -11%)</b>

In compiling the long-term forecast for energy use, Estonia proceeds from change in the GDP and sector-based developments, as a result of which it is presumed that final consumption in 2015 will be approximately 2962 ktoe and in 2020, approximately 3248 ktoe. Considering this, Estonia has set the goal of maintaining the final consumption of energy at the same level as 2010 (approx. 2866 ktoe) i.e. reducing final consumption of energy by approx. 11% compared to the level forecast for 2020. Accordingly, final consumption of energy in 2015 should not significantly exceed the current consumption and it should remain between 2938-2986 ktoe (approx. 4% lower than the projected level for 2015).

Keeping energy final consumption at the 2010 level will require decreased energy use, an increase in energy efficiency and the development of renewable energy solutions in all sectors.

## **PRIORITIES OF GOVERNMENT POLICY**

### **12. Implementing long-term structural changes in the energy sector in harmony with Estonia's energy security and energy efficiency objectives.**

A factor that is increasingly starting to impact the state's competitiveness is the existence of an environmentally sustainable and efficient energy sector. Keeping in step with the international climate policy and reducing the energy intensiveness of the economy have an important part to play in ensuring the functioning of the EU internal energy market and carrying out the goals of the national development plan for the energy sector approved in 2009. The greatest challenges lie in the electricity sector, where over 90% of electrical energy is generated from oil shale. A major keyword in the decade ahead is diversification of energy sources as by 2020, a situation must be achieved where the share of no single energy source exceeds 50% of the country's energy balance sheet. This covers both expansion of co-generation of electricity and heat, reconstruction of oil shale fired plants and increasing the share of wind energy. It is also necessary to decide whether Estonia's future energy generation portfolio will include nuclear energy.

From the standpoint of diversifying energy sources and energy security, it will be important to establish sufficient energy connections in the region and to retain the possibility of generating electricity on the basis of local energy sources. The electricity producers in Estonia and other EU member states must be provided with equal competition conditions in relation to producers in non-EEA countries.

In 2010, Estonia's electricity market was opened to a 30% extent and full opening will take place as of 1 January 2013. Whereas Estonia's electricity market is primarily concentrated in one electricity generating company, opening the market will result in an increase in the number of electricity companies and changes in the price of electricity. On one hand, the competition will increase with the market opening up, which should ensure better service for

<sup>9</sup> Initial Ministry of Economic Affairs and Communications forecast

end consumers. At the same time, the state should ensure that the procedural side operates as impeccably as possible and that the market functions successfully.

The current development plan for the energy sector defines the development directions and measures that should lead to attainment of the agreed-upon objectives. On the background of the objectives of the development plan, it is important that the new developments are constantly analyzed and evaluated in the context of long-term aims. The important keywords in coming years are 100% opening of the electricity market, launch of the renewed pan-European greenhouse gas emissions market, and the analysis of the impact of the functioning of the internal renewable energy subsidy scheme.

### **13. Reducing the general resource-intensiveness, including energy intensiveness, of the economy, through increasing energy efficiency.**

#### **ENERGY CONSERVATION**

A factor that is impacting the state's competitiveness to an increasing extent is the energy intensiveness of the economy and the ability of various sectors to achieve energy savings through the adoption of new technologies and solutions. In light of better competitiveness as well as the obligations to the European Union, the objective of the government is to maintain energy final consumption at the level of 2010.

Energy efficiency is being promoted in Estonia in nearly every field, but the points of emphasis and nature of the measures have been very different. The energy efficiency policy has been very strongly aimed at households through various measures that increase energy efficiency of buildings. Investments have been made into promoting energy efficiency in public buildings. The primary instrument for influencing energy use in the transport sector has been excise duties, and the fuel excise has been raised on ten occasions in the last 15 years. Today's level of final consumption of energy in the sectors and the forecast for the next ten years shows that the greatest growth and the need for sectoral measures will be in industry, households and transport.

In the coming years, attention must be devoted to conservation of electricity, motor fuels and other fuels in private households. Investments into energy efficiency in apartment buildings must be continued and state measures for promoting energy efficiency of private houses must be expanded. In industry there is currently potential for an estimated 30% heat and 10% electricity conservation, and attaining this will require adoption of new technology and an increase in awareness. Energy use in transport must be controlled through three activity directions – reducing the need for transport, increasing use of public transport and increasing the economy of vehicles. Public sector energy use must be treated separately insofar as the behaviour of the public sector must serve as a role model for other sectors. Increasing capability for managing electricity consumption through development of an intelligent power grid in Estonia will also contribute horizontally to energy conservation in all sectors.

In light of the above, the most important measures will be making energy efficiency requirements for buildings more stringent, investing into apartment buildings, private homes, and industry; and various activities that decrease energy use of transport.

## **RESOURCE EFFICIENCY**

In recent years, the Estonian government has carried out a so-called ecological tax reform, the goal of which is to increase environmental taxes and reduce labour taxes. The same direction must be continued in future, taking into account the opportunities of different sectors to adapt to an environmentally sustainable economy. Estonia has a well-functioning environmental tax system. By and large this system is completed, while details are still constantly being developed. A pollution charges replacement system also comes into effect in the case of investments that reduce emissions. At the same time, the objectives of comprehensive environmental protection have not yet been achieved, and thus attention must be devoted to the aspect of assessing the impact of environmental taxes and the monitoring of implementation of charges.

A key requirement for a sustainable economy is that the state must be a role model in setting behavioural and consumption patterns, and thus emphasis must be laid on promoting environmentally-sustainable public procurements. It will be important to prioritize use of renewable resources instead of limited resources. The availability of agricultural and forestry land will create conditions in Estonia for development of a “bio”-economy, which could become a significant economic sector for Estonia with investment support. R&D in this field should look for solutions for enhancing the value of biomass in Estonia– i.e., to use it to produce products with as high a value as possible.

The most important activities that promote conservation of resources can be strengthening the impact assessment of environmental charges and devoting attention to the possibilities for developing the “bio”-economy. The potential of biogas for fulfilling the goals listed above requires analysis.

## SUSTAINABLE AND ADAPTIVE PUBLIC SECTOR

This field – a sustainable and adaptive state sector – encompasses government activities aimed at increasing macroeconomic stability and creating a general favourable economic environment; this means primarily tax and budgetary policy as well as activities related to developing the government sector itself.

### ESTONIA 2020 OBJECTIVES

Public sector debt as a percentage of GDP remains low		
Current level 2010	Estonia's target 2015	Estonia's target 2020
6.6%	5.4%	-

In the last 15 years, government debt has been low, between 4-7%. The consolidated debt level was 951 million euros at the end of 2010, decreasing 4% compared to the year before. Nearly two times less money was spent on servicing interest expenses than in 2009. In the coming years, some pressure can be expected in the direction of growth of debt in absolute figures; at the same time debt as a percentage of GDP will shrink.

### PRIORITIES OF GOVERNMENT POLICY

#### 14. Reaching a government sector budget surplus by 2014 and maintaining this position in the long term

Surplus is the primary means for the government to prepare for the **negative pressure that demographic development will bring to bear on the budget** over the long term. The surplus will allow the state's already liquid funds it drew on during the economic crisis to be replenished in the medium-long term and creates a buffer against possible economic setbacks in future. It also safeguards the reputation of strong monetary policy of the Estonian state, and reliability in the eyes of foreign investors will increase. One component of a business environment that stimulates growth is a moderate tax burden, which will have the effect of leaving enough funds at the disposal of private investors. A moderate **tax burden requires the government sector's revenue and expenses to be kept in balance** in the medium-long and long term.

Just like other EU member states, Estonia must take into account in carrying out its budgetary policy the fact that it is part of a common economic and monetary union and must fulfil its obligations (those stemming from the treaty establishing the European Union and the Stability and Growth Pact, processes stemming from the European Semester). For Estonia, it is important that measures be followed which help member states decisively put in order their budgets along with establishing a new and more stringent regime, reducing public sector debt and thereby raising the reliability of the entire euro zone in the aftermath of the crisis. The crisis showed that the euro area must have a safety net for supporting countries in difficulty, and thus Estonia must make its contribution in solidarity with other euro area members both into the current European Financial Stability Facility and the Stability Mechanism.

The government will aim to attain structural budgetary balance by 2014 and thereafter, taking into account economic cycles, to compile surplus state budgets in the medium and long term.

**15. Improving the sustainability of social expenditure in the public sector in the face of decreasing working-age population and ageing population, ensuring effective health care and well-oriented and effective social policy (including the necessary support services).**

In Estonia as in other developed countries, one challenge is **ensuring long-term financial capability for public social spending**. This is complicated by demographic changes, i.e. the decrease in the working-age population and the increase in the number of pension-age people.

In summer 2011, a **study on sustainable financing of the social insurance system will be completed**, spearheaded by the Ministry of Finance. The analysis will provide a thorough overview of state social insurance schemes, above all the sustainability of current financing of health insurance, pension insurance and unemployment insurance and the expedience and effectiveness of possible alternatives.

To keep otherwise capable and well-trained people active on the labour market and aim resources at providing other social services, it would be expedient to review the **special pensions system and to reduce or abolish the old-age pensions under favourable conditions**. Likewise, the general pension age reform decided in late 2009 should be continued, raising the pension age by three months each year starting in 2017, reaching 65 years of age in 2026. Moving to a more need-based system also means abolishing distinctions between public and private sector employees. To do so, the **Public Service Act will be structured on similar grounds as the Employment Contracts Act**.

**16. Continuing a budgetary policy that supports competitiveness (high level of productive expenses, increased flexibility, controlling public sector wage costs).**

Estonia's high level of **productive expenditures in recent years (investments, education costs, R&D costs, etc) in government sector budgets should be maintained and if necessary increased** as these expenditures create new foundation for economic growth and greater tax revenue. In compiling the budget, the ratios of productive expenses are monitored, such as the percentage of investments or education expenditures, and the establishing of ceilings on operating expenses will be considered. These objectives will be considered in the negotiations for the next EU financial framework (2014-2020).

At the same time, a lower percentage of fixed expenses and revenue-dependent expenses in the government sector budget allows a more flexible response to changes in the economy and society and also makes it possible to ensure need-based financing of sectoral policies. In the medium-long term, Estonia's competitiveness will benefit if **the growth of the public sector's expenses on wages and salaries is in proportion to the growth in productivity**. If salaries grow faster than productivity, the competitiveness of enterprises will be weakened in the longer term, and domestic inflation pressures will be increased, and this will in turn mean greater pressure on government sector expenditures through transfers related to wages and salaries.

**17. Continuing the gradual reduction of taxes on labour and profits and to increase taxes on consumption and use of natural resources.**

Greater taxation of wages and profit will limit economic growth more than the equivalent amount of taxation on consumption and use of the environment. For this reason, we must support at every level **a shift in taxation from workforce (direct taxes) to taxation of**

**consumption and resource use (indirect taxes).** Besides geographic location and reputation of the state, taxation is one of the most important factors that helps draw foreign direct investment to the country. Favourable taxes are the linchpin for positive investment decisions in cases where other prerequisites (basic infrastructure, education, security) are ensured to a degree comparable with other countries. Thus, as one measure to be established, a ceiling will be set on the pension insurance component of the social tax.

Efforts must be continued to harmonize indirect **taxes that have a significant impact on the functioning of the EU internal market and to abolish exceptions in the EU.** Direct taxes and tax systems (rates) reflect every country's specific and unique social and political choices, and thus the principle of freedom of choice of member states must remain in place in this regard.

Estonia must become the 28<sup>th</sup> tax system to support the uniform consolidated income tax base on condition that it will simplify the functioning of the entrepreneurial environment and that it is possible to maintain the current Estonian corporate income tax principles. Simplicity, transparency, low administrative costs are of key importance for Estonia in maintaining and increasing the competitiveness of the entrepreneurial environment.

## **18. Avoiding macroeconomic imbalances**

The challenges that lie ahead for economic policy in coming years are related to reinforcing the institutional framework to allow **imbalances to be better controlled and to avoid the potential for recurrence of imbalances.** It will also be important to ensure the better functioning of the business environment and the labour market, so as to increase long-term economic growth prospects.

The impact of the factors that caused overheating of the economy in 2005-2007 has now abated and economic growth is influenced by other factors (foreign demand and increase in competitiveness), therefore the occurrence of a similar boom in internal demand is unlikely in the near future. Yet we must still be ready to mitigate such economic imbalances should they arise.

In this connection it is planned to initiate many reforms that this strategy has also documented, such as **public sector reform** for slowing wage growth, **reducing workforce tax burden, reform of special pensions and pensions under favourable conditions,** and – with regard to more specific measures – **reducing the tax refund** obtainable from housing loan interests. The continuing manifestation of the labour market reforms already carried out in the last few years is also important.

### **Primary reforms to be carried out during the year (commitments for Euro Plus pact):**

#### **1) Reducing the ceiling of the income tax incentive to 1,920 euros.**

The purpose of the reform is to improve the sustainability of public finances and to reduce future risks of economic imbalance, including through the impact of housing loan interest tax refunds on real estate prices and inflation. The current income tax incentive ceiling is 3,195 euro.

**2) First stage of special pensions schemes reform.**

The principles and schedule for the reform will be developed this year and the first stage of the amendments to the legislation establishing special pensions will take place. The reform will reduce long-term pressure on the sustainability of public finances.

**3) Public service benefits reform and increasing transparency of the wage system.**

The Public Service Act will be updated. The updated Act will reduce benefits for public servants and reorganize the salary system for public service, making it more flexible and transparent. In addition, the legislation is also aimed at increasing flexibility of the public service and the effectiveness of its activities.

**4) Bringing the budget into balance in 2013 and achieving a surplus in 2014.**

The objective and needed measures were approved in the Estonian Stability Programme and it will be taken into account in compiling the annual state budgets.

**5) Inclusion of public sector budget balance requirement in the state budget base law.**

As a reform, the law containing the basis for compilation of the state budget and accompanying laws will be amended.