Sustainable Growth and Employment

– A Norwegian Perspective on the EU Growth and Jobs Strategy

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Introduction

Norway is doing well. The Norwegian economy has experienced a period with extraordinary growth over the last four years. We must go 30 years back in time to find a similar period of growth. The business sector has high profitability. 170,000 jobs have been created the last two years, the labour force participation rate is high, and the unemployment rate has not been this low since the 1980's. The development indicates that we have a policy that promotes growth and wealth creation.

Norway's terms of trade have improved substantially with the entrance of China, India and the new EU member states into the world economy. A more globalized world economy gives new opportunities to benefit from national comparative advantages, but it also makes the Norwegian economy more vulnerable to negative shocks that take place in other parts of the world. The recent developments in international financial markets are a reminder of this.

Still, the ongoing globalization has not weakened the governance of the society. On the contrary, governmental policy has proven itself to be an efficient defence against the negative effects of globalization, and at the same time to be a platform for the positive effects. The Nordic welfare model ensures welfare services and just distribution of income. At the same time, it is open and flexible enough to meet the challenges that globalization brings. Our ability to reorganize, renew and adjust our society to new times and needs has contributed to making us - along with the other Nordic countries - succeed in combining comprehensive welfare schemes with a competitive economy. This is also one of the reasons why the Nordic countries have a higher economic growth than the average of the EU member states.

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However, the Norwegian economy finds itself in a unique situation. The large petroleum revenues of today make it easier to consume more, while focusing less on the rest of the industry. The production of oil and natural gas will eventually decline, and the ageing population will require increased public expenses. Therefore, the competitiveness of the export-oriented industries will determine our wealth creation in the future. To maintain the competitiveness of the industry in Mainland Norway, and with that, also our high standard of living, new measures in several policy areas must be taken.

The European Union's Strategy for Growth and Jobs is comprehensive and contains elements substantial to wealth creation. This makes the Strategy relevant to Norwegian conditions. In Norway, measures are taken within several of the policy areas covered by the EU Strategy. This publication presents the Strategy in a Norwegian perspective, and gives, among other things, an overview of the key areas in Norway. Measures such as increased R&D input, increased efforts to enhance competency in schools, strengthening competitiveness for the industry, and reforming state finances must be taken in order to prepare ourselves for prospective competition. The Strategy for Growth and Jobs focus on these measures, as they are relevant also to our neighbouring countries and the rest of Europe today.

This report from the Ministry of Trade and Industry consists of three parts. In chapter 1, we present the main features of the European Union's Strategy for Growth and Jobs, and its relevance for Norway. Chapter 2 deals with Norwegian policy in the areas included in the Strategy. In chapter 3, EU's structural indicators are presented, and we compare Norwegian data with data from EU member countries.

Contents

1. EU's Strategy for Growth and Jobs (Lisbon Strategy)

1.1 What is the EU Strategy for Growth and Jobs?

The EU Strategy for Growth and Jobs, also referred to as the Lisbon Strategy, is one of the initiatives taken on community level to accelerate the economic reform process in the member states. The main objective is to stimulate growth and employment in the EU through expanded productivity growth and capacity for change. EU leaders agreed to this proposal at the 2000 Spring European Council.[1] In 2005, the Strategy was re-launched to focus more strongly on growth and jobs.

1.2 Why was this Strategy initiated?

In the end of the 1990's, economic growth in the EU appeared to have stagnated in comparison with the US and Japan.

Despite major economic reforms, such as the creation of the internal market and the Economic Monetary Union, economic growth in Europe has not matched the high expectations that were created. Strong growth in some of the countries, especially Spain and Ireland, was not enough to prevent the region as a whole from lagging behind other important economic poles, such as the US. This is especially the case if we focus on growth in labour productivity after 1995. In addition, the total unemployment rate was entrenched at a higher level in the EU than in the US.

1.3 2005: The Strategy is relaunched

When the EU Strategy for Growth and Jobs was initiated in 2000, it aimed for Europe to become "the most competitive and dynamic knowledge-based economy in the world by 2010, an economy that could develop sustainable growth with more and better jobs and greater social cohesion, all while respecting the environment."

When evaluating the Strategy in 2004, it was concluded that the objectives above had not been met so far. There were several reasons for this. The Strategy had a large number of priorities and constant revisions also took up time and capacity that the member states needed to implement the planned reforms. Moveover, the division of responsibilities between the European Commission and the member states were somewhat diffuse.

In 2005, the Spring European Council established new guidelines for the Strategy. The political leaders of the EU states wanted a strategy with more focus on economic growth and employment. They stressed that Europe needed to improve its competitiveness by investing in knowledge, innovation and human capital. However, it was emphasized that growth and competitiveness should be seen as instruments to ensure social and environmental considerations. The Strategy would remain based on economic growth and employment on one hand, and maintain its social dimension and due regard for the environment on the other hand. The Commission as well as the member states should promote measures touching on all three pillars, and synergy effects were to be given special attention.

These general themes founded the basis for 24 integrated guidelines. The 24 guidelines covered broad macroeconomic, structural and employment policy measures. Every guideline contained detailed formulations of possible measures.

The main reason for relaunching the Strategy was making it more focused. Two explicit targets were introduced. Both are to be achieved by 2010 and are the following:

(i) The member states shall reach an overall employment rate of 70 percent, 60 percent for women and 50 percent for older employed persons.
(ii) Expenditure for research and development shall amount to at least 3 percent of GDP.

Beyond these two targets, the integrated guidelines contain a range of specific suggestions for initiatives that the member states are encouraged to make use of. It is not expected that the member states will have a comprehensive follow-up of all of

[1] The Spring European Councils have concentrated on the follow-up of the Lisbon Strategy for the last years

these areas. Each country must decide which initiatives they want to prioritise. The Commission does however consider it important that each country elaborates why they choose not to prioritise certain initiatives.

To achieve a more efficient implementation and better foundation of the Strategy in the member states, every country developed a National Reform Programme in 2005 for the period 2005-07, based on the 24 integrated guidelines. Since 2006 the countries have produced national reports annually to the Commission about the progress in their programmes. The Commission is in charge of resuming and evaluating the allover progress of the Strategy in a single document. This so-called Progress Report is submitted to the Spring European Council every year. Furthermore, in 2005, the Commission prepared a Reform Programme for the years up to 2008, covering all measures on community level and with regards to the areas that require convergence between the member states. The Commission's Reform Programme is also evaluated annually.

To avoid too frequent revisions, the European Council decided to pursue the relaunched Strategy in three-year-cycles, with 2005 as the first year, and with the possibility of renewing it in 2008. 2010 is therefore no longer stated as the final year of the Strategy.

The Spring European Council 2006 made the Strategy for Growth and Jobs even more focused, when announcing four priority areas in the already relaunched Strategy:

1. Increased investments in R&D and innovation
2. A more dynamic business environment
3. More flexible labour markets
4. A common energy- and climate policy

The heads of government also decided to carry through some key projects by the end of 2007. The member states were to make sure that:

- A business could start up within a week
- All formalities for business establishing could be handled in the same place, a so-called "one-stop-shop"
- Common principles for "flexicurity"[2] were agreed on
- The administrative burden was reduced by 25 percent

1.4 Results so far

Three years after relaunching the Strategy that is to modernize Europe's economy, the conditions are improving, according to the European Commission. Its Strategy Report from December 2007 on economic reforms in the EU concludes that the Strategy for Growth and Jobs is contributing to the improved results of the EU economy. The Commission claims that the structural reforms have already increased the growth potential for the future. However, many member states still have a long way to go, and the pace of reform varies from country to country.

Many results are encouraging …..

- Structural reforms have contributed to an increase in the potential GDP growth rate in the euro zone of about 0.2 percentage points since 2005, to about 2.25 percent in 2007.
- Almost 6.5 million new jobs have been created the last two years. An additional 5 million jobs is expected made within 2009.
- The unemployment rate is expected to fall below 7 percent, the lowest level since the mid-80's. For the first time in a decade, strong increases in employment have gone hand in hand with solid productivity growth.
- The public deficits (of the budget and debt) in the EU member states have fallen significantly.
- In most member states, it is now possible to start up a business within a week, in a "one-stop shop", and substantial progress has been made in the work with the EU program for better regulation
- Almost half of the member states have developed – or is currently in the process of developing – a policy based on "flexicurity". Agreement has been reached on common principles of "flexicurity" that the member states will apply and adapt to their own specific situation.
- All states have established a national target for total investments in R&D. If all states reach their targets, the EUs investments in R&D will be 2.6 percent of GDP in 2010, compared to 1.85 percent in 2006.

….. But still much more is to be done

- Investments in R&D as a share of GDP has lately lost pace with the high growth rates of overall economy, and fallen to 1.85 percent in 2006. This tendency has taken the EU further away from its target of 3 percent.
- A lot remains to be done to reduce the administrative burden and improve the business

[2] "Flexicurity" refers to the combination of a flexible labour market, employment security and active labour market policies

climate, especially when it comes to small and medium sized enterprises (SMEs). Also, opening up network industries and services to competition has been slow.
- Many labour markets remain segmented, with well-protected insiders and more precarious outsiders on contract with uncertain prospects.
- Education systems can still be adapted in order to give young people and other employees the skills both they and the employers need.
- Worker mobility still remains low. In some member states workers still face significant barriers when changing jobs.
- Europe is still lagging behind other leading economies in investment in information and communication technologies (ICT) and in their use to enhance productivity.
- Many member states are not on course to fulfill their Kyoto targets. These will need to make a major effort to reach the ambitious targets agreed on by EU leaders at the 2007 Spring European Council and to be implemented through the energy and climate change package the Commission brought forward in January 2008.

1.5 Moving ahead – Will the EU continue the reforms for higher growth and employment?

The first three-year-cycle has come to an end, and the shaping of the Strategy for Growth and Jobs for the next three years (2008-2010) was initiated by the European Commission's Strategic Report of December 2007. This report shaped the discussions and decisions of the Spring European Council 2008 on the Strategy's future.[4]

In March 2008 the state and government leaders of the EU member states decided to continue undertaking economic reforms both on community level and nationally the next years. Further to the Commission's Strategic Report, The Spring European Council decided to leave the main objectives of the Strategy from 2005 unchanged. It needs adjusting, not a thorough alteration. The Council launched the second three-year cycle of the Strategy by validating the current Integrated Guidelines for the period 2008-2010. The objectives of the National Reform Programmes also remain intact, with every member state focusing on its "points-to-watch" and the country-specific recommendations from the Commission. The focus of the new cycle will be on implementation rather than revision.

The European Council reconfirms the four priority areas agreed at its Spring 2006 meeting as the cornerstones of the renewed (Lisbon) Strategy. It also endorses a number of new measures on each of the four priority areas presented by the Commission in its Strategic Report:

1. *Knowledge – Education, R&D and innovation*: The report proposed steps towards a "fifth freedom", i.e the free movement of knowledge. This will be possible through the creation of a European research area and an integrated patent jurisdiction with a single affordable patent. An EU-wide market for venture capital for the most innovative companies will also be promoted. The target of R&D investment amounting to three percent of GDP is further emphasized. The European Council calls upon the member states to draw up national broad-band strategies and set national targets for high-speed Internet usage aiming at a 30 percent connection rate of the EU population and connection of all schools by 2010.

2. *Business environment:* The report suggested an integrated policy approach through a European Small Business Act, to foster the development and growth of the millions of SMEs, where nine out of ten jobs are created. In order to improve the single market, a follow-up of the Commission's Single Market Review needs to be ensured on a yearly basis. Efforts on reducing administrative burdens arising from EU legislation by 25 percent by 2012 are considered an immediate priority by EU leaders. They also call for reinforced efforts to strengthen competition in network industries (energy, electronic communications) and to adopt the adequate regulatory frameworks.

3. *Investing in people and modernizing labour markets:* The European Council urges member states to draw up actions plans and set targets to substantially reduce early-school leaving and improve basic reading skills. Agreed common flexicurity-principles should be implemented in all member states, and continued attention needs to be given to youth employment as well as the employment of disabled persons. In view of increasing skills shortages in a number of sectors, the Commission is invited to present a comprehensive assessment of the future skills requirements in Europe up to 2020.

[4] By outlining the national arrangements giving effect to those principles in the 2008 National Reform Programmes

4. *Energy and climate policy:* This part of the Strategy is given increasingly more attention, as its importance is growing both globally and to European growth and employment. The Spring European Council endorsed its conclusions from 2007, and emphasized that focus is now on implementing these. Greenhouse gases shall be reduced by 20 percent from 1990 till 2020 (partly through carbon capture and storage) and of the consumed energy in 2020, 20 percent shall originate from renewable sources. The ambitious climate package[5] proposed by the Commission includes new legislation that allows for these targets to be reached. The European Council also stresses the importance of setting mandatory energy reduction targets for government buildings and systematically including energy efficiency as one of the award criteria for public procurement.

Several of these new measures are elements in the new Community Lisbon Programme for the period 2008-2010. The Programme from the Commission sets out ten key priorities for EU level reforms over the next three years. The Small Business Act, the better regulation agenda, the research and higher education area and patent initiatives mentioned above are among these key objectives. In addition the renewed Social Agenda due in 2008 will play a key role in strengthening the social dimension of the Strategy. Other priorities are investing more in people and enhancing employability, taking further steps to integrate EU financial services markets and enhance their stability in the light of the current turbulence, and the promotion of a new sustainable industrial policy.

The external dimension of the Strategy will be reinforced. The European Council considers equal conditions of competition as increasingly important on the international level. Dialogue with third countries will be strengthened and streamlined, with a clearer focus on globalisation issues of mutual interest such as market access, regulatory convergence, migration and climate change. The European Council welcomes the Commission's intention to report annually on market access, identifying countries and sectors where significant barriers remain.

A continued EU-level commitment to structural reforms and sustainable development and social cohesion is likely to be necessary after 2010. The European Council therefore invited the Commission and other organs to start reflecting on the future of the Strategy in the post-2010 period.

1.6 A Norwegian perspective on the EU Growth and Jobs Strategy

The Growth and Jobs Strategy is the EU's answer to two of the most important challenges this century: Globalisation and demographic changes. These are challenges that are confined to the EU, but affect Norway as well.

Comprehensive changes are taking place in the global division of labor. The world is becoming a market place, where firms, jobs, goods and services are crossing borders. Almost all parts of business in the developed world face challenges and pressure to adapt to a new reality. At the same time, the Western population is aging fast, a fact that in some years from now will translate into increased public expenditure to pensions and eventually health care. The Strategy for Growth and Jobs is an attempt to find solutions in a European perspective, at the same time as it is meant to promote national strategies for economic growth. Many EU member states face considerably larger challenges than Norway. The Strategy for Growth and Jobs can conduce the member states to grasp their national issues as to globalisation and demography.

As Norway's closest neighbour geographically, the EU is a natural point of reference for us. We share near historical and cultural relations; the area comprises most of our central allies and our major trading partners. The work on the Strategy for Growth and Jobs affects the internal market and thereby the integration through the EEA Agreement. As part of this, Norway should take an active stand towards an initiative that is likely to form the economic development in Europe in the future. An economically strong Europe is favorable not only for the EU, but very much so also for the Norwegian economy. If EU succeeds in improving their competitiveness, this would increase spending power in the EU area. It will stimulate the demand in our most important market for exports, make goods better and cheaper to import, and contribute to increased wealth creation in Norway.

The objectives in the Strategy for Growth and Jobs are goals we share for the development of Norwegian society. The political platform of the Government is built on the declaration of Soria Moria, where it is stated that Norway is to become

5 The climate package consists of several parts, e.g. the directive on carbon capture and storage, the directive on renewable energy and the Emission Trading System (EU-ETS). Also there will be new guidelines for state subsidies and report on energy efficiency

one of the leading innovative, dynamic and knowledge-based economies in the world, in areas where we have advantages. In order to achieve this, a broadly based business policy is needed. Indeed, the Norwegian industrial policy comprises welfare benefits such as a place in a kindergarten, public elementary school and free university tuition as well as sick pay-, rehabilitation- and unemployment schemes. In the same way, the policy areas in the Strategy constitute a part of the broad industry policy; economic policy, research policy, market access, communication and policy for improving the efficiency and renovating public sector.

The climate and environmental policy is becoming increasingly important in maintaining economic growth in the long term. Climate and energy have since 2006 been one out of four main priorities in the Strategy for Growth and Jobs. EU's Emission Trading System (EU-ETS), a part of the EEA Agreement, will play a major role in the Norwegian climate policy in the years to come. Moreover, Norway is an active partner in the international work in progress on environmental technology.

Norway is participating side by side with the EU member states in several of the programs initiated by or linked up to the work on the Strategy. Some examples are the 7th Framework Programme for Research and the programme for lifelong learning in the field of education. Many of these programmes have been of great value to the Norwegian policy work. Measures such as scaled-up efforts for R&D and increased input in human capital, as well as measures to strengthen industries' competitiveness or government finances, have now been put on the agenda in Norway, as in the EU.

As mentioned above, EU countries carry through National Reform Programmes linked to the Strategy for Growth and Jobs, programmes that the European Commission evaluates annually. As an EFTA-member state, Norway is not required to present a similar overview of measures taken on the Strategy's policy areas. Worth noticing therefore, that the text in this report's chapter 2 presents Norwegian policy in the fields comprised by the Strategy.

Norway can also be compared to other European countries by statistics. The EU has defined 14 structural indicators to evaluate the progress in the core areas of the Strategy, and the EU centre of statistics, Eurostat, also publishes figures for Norway on the 14 different policy areas. In chapter 3 of the report, we present these structural indicators for Norway, the EU member states and also some other countries. Some of the indicators are familiar economic variables, whereas others are more directly linked up to the goals EU has set for the Strategy. Altogether, the indicators can constitute a useful source of information in the broad debate on Norwegian businesses and industries.

The 24 integrated guidelines of the EU Strategy

The integrated guidelines are at the core of the EU Strategy for Growth and Jobs. The EU has identified a total of 24 themes, relating to the three areas of macroeconomics, structural measures and employment. One or more measures are proposed under each guideline, with a total of 90 measures.

The integrated guidelines cover a broad range of economic policy areas. However, in themselves the guidelines and the proposed measures are of a general nature. In practice, all the EU countries will have a policy within these areas. The decisive factor in whether this generates growth and employment is the specific formulation of policy within the area. Under this Strategy, as in other areas, the opportunities are to be found in the detailed formulation of policies. It is up to each member state to specify these in its National Reform Programme.

Macroeconomic guidelines
(1) Secure economic stability for sustainable growth
(2) Safeguard economic and fiscal sustainability
(3) Promote a growth- and employment-orientated and efficient allocation of resources.
(4) Ensure that wage developments contribute to economic stability
(5) Promote greater coherence between macroeconomic, structural and employment policies
(6) Contribute to a dynamic and well-functioning EMU

Microeconomic guidelines
(7) Increase and improve investment in R&D, in particular by private business
(8) Facilitate all forms of innovation

(9) Facilitate the spread and effective use of ICT and build a fully inclusive information society
(10) Strengthen the competitive advantages of its industrial base
(11) Encourage the sustainable use of resources and strengthen environmental protection
(12) Extend and deepen the internal market
(13) Ensure open and competitive markets inside and outside Europe and to reap the benefits of globalisation
(14) Create a more competitive business environment
(15) Promote a more entrepreneurial culture and create a supportive environment for SMEs
(16) Improve European infrastructure

Employment guidelines
(17) Implement employment policies aiming at achieving full employment, improving quality and productivity at work, and strengthening social and territorial cohesion
(18) Promote a life-cycle approach to work
(19) Ensure inclusive labour markets, enhance work attractiveness, and make work pay for jobseekers, including disadvantaged people, and the inactive
(20) Improve matching of labour market needs
(21) Promote flexibility combined with employment security and reduce labour market segmentation, having due regard to the role of the social partners
(22) Ensure employment-friendly labour cost developments and wage-setting mechanisms
(23) Expand and improve investment in human capital
(24) Adapt education and training systems in response to new competence requirements

Old Age and Specialization - REPORT FROM ECON AND MENON (2007)

ECON and MENON have on behalf of the Ministry of Trade and Industry prepared the report *Alderdom og spesialisering* ("Old Age and Specialization") on how Norwegian business life and business structure will be affected by globalization and the demographic evolution in the future.

In order to analyze prospective alterations of the business structure, ECON/MENON considers imperative to understand the evolution up till today. The report stresses two considerable modifications of the Norwegian industrial structure the last decades: Knowledge-intensive business has grown swiftly, whereas the industries producing homogeneous goods have experienced the opposite (a decline).

The alterations of business structure observed in the first phase of globalization will continue, according to the report. However, two substantial changes will occur: A shortage of labour is to decelerate growth in several service sectors, and the international competition in knowledge-intensive services will increase. In addition, the ageing of the population will affect the future industrial structure to a larger extent than will globalization. The shortage of labour will in fact limit the growth potential in all industries. Moreover, the demand for health and care services will result in this sector occupying an increasingly growing part of the work force.

Alderdom og spesialisering shows how globalization and demographic changes might affect employment in selected industries in the years up till 2025. Knowledge-based services will grow, but less than they have grown in the last 15 years. This is the case also within health and care services. Producers of homogeneous industrial goods, e.g. metals, will notice globalization primarily by the global division of labour becoming more pronounced. In the seafood industry, the increased demand will coincide with improved efficiency and structural changes, resulting in rather stable employment. The report considers unlikely that Norwegian tourism will maintain its share of the global market. Maritime transport and services will face strong global demand, but (the) growth will be realized abroad. As to the petroleum industries in Norway, the activity is expected to decline. The supply industry is thus likely to increase its share of exports. However, exports alone will not be sufficient to compensate for the general economic decline in this industry.

The report indicates that the industrial structure will be substantially altered in 15-20 years from now. The changes will not be greater, though, than what we have already experienced the last decade.

The Globetrotters - REPORT FROM SNF (2007)

The Institute for Research in Economics and Business Administration in Bergen, the SNF, prepared in 2007 a report on behalf of the Ministry of Trade and Industry describing the consequences of globalization to Norwegian economy. The report was a follow-up of the SNF-report *De gode hjelperne* ("The good helpers", demanded by the Ministry in 2006) about the effects of the development in China and India. The analysis in *Globetrotterne* was expanded to considering labour immigration and business investments abroad.

The analysis takes a long-term perspective, and SNF considers paths of development for the Norwegian economy from 2005 till 2060. However, the adjustments and adaptations taking place in the course of process are as important as the long-term perspective. The analysis allows for positive cluster effects in the knowledge-intensive parts of Norwegian business exposed to international competition, and these effects are individually important to the development path of the economy.

The main conclusions of SNF's previous report (*De gode hjelperne*) were that Norway will draw considerable benefits from globalization. Further, that the industrial alterations that follow (globalization) will not be more extensive than the changes we have faced in the course of time, changes that the Norwegian economy has proven capable of addressing. These results are all confirmed and emphasized in their latest report *Globetrotterne*.

Labour immigration and Norwegian business investments abroad will add gains to those resulting from increased trade with China and India. An important conclusion from the analysis in *Globetrotterne* is that these effects, together with the changes we face in workforce and domestic access to capital, will not bring along more substantial adjustments that what would have occurred otherwise.

Globetrotterne states that Norway may receive considerable immigration of labour in coming years, but stresses that this will be a transitory phenomenon, given that most immigrants from Eastern Europe will return as the income level in their country of origin gradually approaches the income level in Norway. This implies that labour immigration will not affect Norwegian business structure and income level in the long run. It might, however, have an effect in the shorter run, especially by delaying the downscaling of labour-intensive production exposed to international competition in Norway.

Another noteworthy element in the report is the positive interaction between Norwegian business investments abroad and the productivity and economic growth in Norway. The access to highly qualified labour will limit the growth potential of knowledge-based activity in Norway. This entails that direct investments abroad will be a just as important source to Norwegian productivity growth as the growth in the cluster exposed to international competition in Norway.

2. Norwegian Policy

2.1 Fiscal policy guidelines

The fiscal policy guidelines (the fiscal rule) imply that petroleum revenues are being phased gradually into the economy, more or less in line with developments in the expected real returns from the Government Pension Fund – Global, estimated at 4 percent. This defines a medium term fiscal policy anchor. At the same time, the guidelines emphasize that considerable weight shall be attached to ensuring stable economic development in the ongoing design of fiscal policy.

The guidelines are facilitating the sustainable management of petroleum wealth, so that future generations may also benefit therefrom. The high current income proceeding from petroleum activities cannot be classified as revenues in the ordinary sense of the word. Oil and naural gas are non-renewable resources, and the proceeds received by the State are to a large extent mirrored by a reduction in the petroleum wealth of the State. The guidelines imply that the State's revenues from petroleum activities are being transferred to the Government Pension Fund – Global, while spending is limited to the expected real return of the Fund. This means that the capital of the Fund will not be reduced over time.

In the first couple of years after the fiscal rule was implemented in 2001, the spending of petroleum revenues increased some more than the expected real return of the Government Pension Fund – Global. Among other things, this has to be seen in the context of the recession experienced by both the international and the Norwegian economies after 2001, at the same time as the Fund for a couple of years grew slower than expected. Since 2003 the Norwegian economy has recuperated at the same time as the Fund has increased considerably, and the excess spending of petroleum revenues has been scaled back. Since 2006 the spending of petroleum revenues has been below 4 percent of the capital of the Fund.

Fiscal policy needs to be analyzed in a long-term perspective. The fiscal rule envisages significant savings being accumulated on the part of the State. Such savings are not sufficient to meet future growth in pension expenditure and other age-related expenditure relating to health and care. Assuming continued good growth in the capital of the Fund, as well as in Norwegian economy, it will be in conformity with the fiscal rule to spend less petroleum revenues than the real expected return of the Government Pension Fund – Global for some years. This will also reduce the need for difficult future reallocations upon the advent of growing age-related expenditure.

2.1.1 The long-term challenges of fiscal policy

The ageing of the population will eventually pose major fiscal policy challenges. When approaching 2060 there will be almost twice as many retirement pensioners per person of working age as at present. In addition, future pensioners will on average have accrued more supplementary pensions than the current ones. The ageing of the population will also influence other government expenditure items, primarily health and care expenditure. At the same time, an ageing of the labour force suggests a continued increase in the number of recipients of disability pension.

The long-term challenges in fiscal policy can be illustrated by estimating generational accounts. The Government budget proposal for 2008 shows that public budgets must be strengthened by 4-6 percent of Mainland GDP as from today to be in generational balance.

The National Budget 2007 presents macroeconomic projections showing a long-term adjustment need in government finances corresponding to 4 ½ percent of Mainland GDP in 2050 and 7 ¼ percent in 2060. To ensure balance in the budgets, the revenues must be increased or the expenses reduced. The projections are based on the spending of petroleum revenues consistent with the fiscal policy rule. Moreover, the calculations are based on the continuation of the current National Insurance Scheme and other welfare schemes, as well as unchanged labour marked involvement on the part of various population groups.

The increase in old-age related expenses contributes considerably to the mounting long-term adjustment need in government finances. In addition, the real return on the Government Pension Fund – Global will over time decline, (measured as a percentage of Mainland GDP). Consequently, the return on the Fund will fund a gradually diminishing share of government expenditure if the expenditures are not reduced.

These mounting challenges require a Pension Reform to ensure a sustainable pension system. In 2001 a Pension Commission was appointed. The Commission presented its final report in January 2004. Based on a white paper from the Bondevik II Government, the Parliament resolved the main principles underpinning a Pension Reform in May 2005. A key principle of the Reform, is the introduction of a life expectancy adjustment which is the most important measure to ensure the long-term sustainability of the National Insurance Scheme if life expectancy continues to increase. This implies that accrued pension entitlements need to be apportioned over a larger number of expected remaining years in line with expected increases in the life expectancy of the population in coming decades. Each individual may counteract the effect on annual pensions by postponing his or her exit from working life and the drawing of pension. Moreover, the pension compromise implied that ongoing pensions shall be adjusted by the average of wage and price growth, as well as the introduction of lifelong accrual, which implies that all years of labour income shall qualify for pension accrual.

On 20 October 2006, the Government presented, in following up the pension compromise, a white paper on the accrual and drawing of retirement pension under the National Insurance Scheme, hereunder a proposal for flexible drawing of retirement pension from the age of 62. The proposal of a new accrual model envisages proportional accrual from the first krone of income, up to a maximum limit, and it will provide for a closer correlation between labour income and pensions than does the present system. At the same time, the pension system will have a favourable distributional profile. The proposal for flexible drawing of retirement pension is designed in such a way that the overall value of pension payments remains the same, irrespective of the age at which retirement is taken. This means that the work incentives are also reinforced and people will be able to combine work and pensions without any set-off in income. The Parliament approved the proposal in April 2007.

The Government's proposal implies that retirement pension expenditure as a percentage of Mainland GDP is reduced from 15 percent to 12 percent in 2050, or by about 20 percent, when compared to a continuation of the current National Insurance Scheme. The pension retirement reform is an important step in the direction of sustainable government finances, and reduces the adjustment needed by about 1¾ percentage points in 2060.

2.1.2 Implementation and follow-up of the Tax Reform

The main objective of the Tax Reform 2006 was to make the tax system more efficient and fair by, among other things, expanding the equal tax treatment of income irrespective of how it has accrued. The reform was also intended to ensure that the Norwegian taxation of income from stock shares is in compliance with the EEA Agreement.

The large discrepancy between the tax rates on labour income and capital income prior to the Tax Reform made it highly profitable to engage in tax planning with a view to have labour income taxed as income from stock shares, which was subject to only 28 percent tax. This resulted in differential treatment of taxpayers, which undermined re-distribution through the tax system, as well as the legitimacy of the tax system. The split system of dual income taxation, known as the split model, which was introduced through the Tax Reform 1992, was intended to curtail the scope of such tax planning. However, it was unable to handle the large discrepancy in tax rates, which in 2004 was up to 36.7 percentage points, inclusive of employers' social security contribution. This was because modifications to the split model and higher tax rates on labour income were introduced after 1992.

The split model was therefore replaced by the Allowance of Shareholder Equity system (ASE) as from 2006. The introduction of the ASE system implies that various business forms (limited companies, partnerships and sole proprietorships) are to a large extent subjected to equal treatment, in as much as they are taxed on the basis of the same main principle. Any profits distributed (net of company tax) exceeding the risk-free rate of return (the rate of return on allowance), are now being taxed at the rate of 28 percent on the part of each personal shareholder or partner. Consequently, the total tax rate on such dividends has been increased from 28 percent (company tax) before the reform, to 48.2 percent (company tax and dividend tax) after the reform. Sole proprietorships will continue

to be taxed on an ongoing basis, and any profits which exceed the risk-free rate of return will be taxed as personal income, i.e. subjected to employees' social security contribution and surtax, if applicable.

At the same time, the maximum tax rate on labour income was reduced between 2004 and 2006 by 10.4 percentage points to 54.3 percent (including employers' social security contribution). The tax rates adopted through the Tax Reform 2006 have resulted in a considerable reduction in the profitability of tax planning aimed at reclassifying labour income as dividends.

The ASE system does not apply to dividends between companies, because income from stock shares would otherwise be taxed several times in ownership chains involving several companies. In order to prevent such chain taxation, companies are exempted from tax on income from stock shares (the exemption method). Income from stock shares will be taxed on the part of individuals, pursuant to the ASE system, when distributed to personal owners. The exemption method in combination with the ASE system implies that the Norwegian taxation of dividends and capital gains is in conformity with the requirements laid down under the EEA Agreement.

The Government has aimed at achieving a favorable social profile in its implementation of the Tax Reform. It has therefore refrained from large wealth tax reductions, and instead chosen to increase the wealth tax and strengthen the social profile by expanding the tax base and increase the

Report from Statistics Norway (2007) – *Effects on Norwegian industrial structure from changes in basic business conditions – the importance of general equlibrium effects*

Statistics Norway has prepared the report *Effects on Norwegian industrial structure from changes in basic business conditions – the importance on general equilibrium effects* for the Norwegian Ministry of Trade and Industry.

The report examines how and to what extent Norwegian industrial structure in the private sector will be affected by lasting changes in basic business conditions in a long-term perspective. The problems are analyzed with the Statistics Norway computable general equilibrium model MSG6. In a general equilibrium model "everything is interconnected". Such a model is capable of capturing mutual influences, spin-off effects and other effects that would be excluded if the effects on one separate industry only were examined. It therefore provides a more complete picture of the economic situation than would a partial equilibrium model.

In the report, Statistics Norway considers changes in the following key business conditions: International capital yield and rate of return, oil and natural gas prices, electricity price, general change in world market prices, increased public expenditures and wage costs.

An important economic insight is that the more industries that are influenced by a change in basic business conditions, and the more uniform the direct effect of this change is to firms' profitability, the less Norwegian industrial structure will be modified. This is because it is the change in the industries' relative ability to compete for common resources that decides whether an industry will grow or decline.

Further, the analysis shows that sheltered industries and industries exposed to competition are affected differently. For instance, changes in international capital yield or rate of return, wage costs and world market prices will have larger effects on industries exposed to competition than on sheltered ones. In addition, the effect is larger the more export-oriented the industry is.

Some industries are affected more than others by changes in basic business conditions. For instance, an increase in the electricity price has a major effect on energy-intensive export industries. The effects of changes in basic business conditions also differ in magnitude. This implies, among other things, that a lasting increase in international capital yield or rate of return of one percent will more than double the employment effect on the industry compared to a 10 percent increase in oil and natural gas prices.

The increase in capital yield or rate of return, petroleum prices and electricity prices affects the industrial structure in three ways: 1) increased costs associated with the loss of competition, 2) change in terms of trade and thereby, altered needs for production exposed to competition and also domestic demand, 3) change in public revenues yielding changes in taxation of labour. These effects vary somewhat in magnitude. Increased rate of return and petroleum prices will for instance have the largest impact on 2).

basic tax-free allowance every year in the period 2006-2008. The basic tax-free allowance will increase from 220,000 NOK in 2007 to 350,000 NOK in 2008, which implies that about 180,000 fewer persons will pay wealth tax. The Government will be paying close attention to the Tax Reform in order to gather knowledge of its economic, distributional and administrative consequences.

2.2 Enhancing the competitiveness of Norwegian enterprises

The Norwegian business sector is increasingly exposed to competition from abroad, both on the national and international arena. The pace of change is accelerating, calling on enterprises to improve their ability to adjust accordingly, in order to stay competitive.

Innovation and restructuring is primarily about using resources in a more productive way. Improved competitiveness in the long run requires a business sector capable of restructuring as well as a competent and flexible work force. Focus on human capital/improved skills, innovation through education, entrepreneurship and research and development (R&D) contributes to creating new and valuable products, processes and business spheres. In this process, new companies will be established, profitable enterprises will thrive and unprofitable business will need to adapt or face liquidation.

The ability to innovate and adapt is influenced by various factors and touches upon multiple policy areas. Different public policy instruments aim at different stages in the innovation process, from basic research via entrepreneurship and industrial research to the marketing of products. General use of policy instruments shall secure research funding of the best projects regardless of business sector. In addition, other policy instruments are directed towards SMEs and also, towards business sectors in which Norway is assumed to have special advantages and considerable potential for growth, such as the marine sector, maritime sector, energy, environment and tourism.

R&D is important to wealth creation if it develops new knowledge and technology that result in a profitable innovation. Research activity with one objective may serve several purposes, and be useful to several enterprises. The welfare gain of research may therefore be greater than the gains a single firm gets from its research activity. The Norwegian policy for research and innovation engenders more and better research and innovation activities in Norwegian companies. The policy is implemented by directly subsidizing R&D, mainly through the schemes of Innovation Norway and the Research Council, and by allowing tax relief for research, e.g. SkatteFUNN. Also, by financing national research institutes and institutions of higher education, the authorities ease the access to advanced expertise and applicable R&D.

In Norway, there is wide political agreement to invest more of the country's resources in R&D. With the White Paper No. 20 (2004-2005) *Commitment to Research* (the White Paper on Research), Norway established the same target as the EU, i.e. to raise the total contribution in R&D to three percent of GDP by 2010. One third is to be provided by public sector and two thirds should originate from the business sector and other sources. The agreed ambition in R&D for Norwegian economy is ambitious, but it is nevertheless shared by many other countries.

2.2.1 Innovation and priorities

Innovation is one of economy's methods of creating wealth daily. Enterprises innovate in various ways and get inspiration from different sources. Impulses to renew or adapt an element of production emerge through interaction between colleagues, clients, suppliers or research institutions. By applying new knowledge and using the old in new ways, firms adapt their activities and develop new products and design, thus conquering new markets and increasing their competitiveness.

Several of the most exiting activities in the Norwegian economy build on expertise and competence from well-established companies. Competence transfers between different sectors and for use in new and different ways are characteristic to innovation processes. Such processes can be more or less demand-driven in the sense that products and materials are developed and find new fields of application in order to solve specific needs or challenges in business life. The innovation in the offshore-adapted supplier-industry in Norway serves as an excellent example. In this sector, new materials, electronic systems, installations and special vessels are being developed and put to use.

Public policy in different domains of the economy influences the business sector's ability to innovate. Prioritized policy areas of great significance to innovation are referred to elsewhere in the report.

A white paper on innovation is currently in progress and will be put forward in 2008. Its objective is to point out how the Government's innovation policies can contribute to sustainable wealth creation in the future.

Research in/for business and industrial research

The Ministry of Trade and Industry administrates both the state's ownership in business activities and the policy instruments aimed at stimulating private business activity in the fields of innovation, research, entrepreneurship, restructuring and internationalization. Innovation Norway is the authorities' main instrument in promoting innovation. Innovation Norway should contribute to business development that is profitable both commercially and to society as a whole, and that would otherwise not have been initiated. Regional and rural business potential can be realized by offering possibilities through innovation, internationalization and marketing/profiling.

R&D in firms contribute to improving existing products and processes, and creates new products, business domains and firms. R&D activity in a firm increases its expertise and capacity to take advantage of external R&D results (from others). A main challenge to public authorities is therefore how to stimulate and trigger industrial-related research. Key initiatives are User-driven Research based Innovation (BIA), development of renewable energy, maritime research and innovation, space activities and the Gassmaks programme on research linked to industrial use of natural gas.

BIA is a relatively new programme under the umbrella of the Research Council of Norway. The programme has research-related innovation as its main objective, meaning that no sectoral or thematic preferences are made. Applicants seeking support will compete solely on the quality of the project-proposal as contributer to research-related innovation and wealth creation. The programme supplements the Research Council's other policy measures within research-related activities. BIA should primarily be an instrument directed towards innovation challenges for enterprises with a R&D-strategy not covered by current specific programmes (included the Research Council's Great Programmes) or projects that are not possible to realize through SkatteFUNN.

In order to stimulate R&D activities in SMEs, tax reductions linked to R&D projects through the SkatteFUNN scheme have proven effective (consult box on the evaluation of the SkatteFUNN scheme). Projects approved by SkatteFUNN will be granted a tax reduction of up to 20 percent of total costs related to an entreprise's R&D-projects. This reduction is added to the normal accounting of expenses of project costs. Projects fulfilling the criteria of this measure are always given consent.

Innovation Norway is also administering programmes promoting development projects. Public and industrial contracts on research and development (OFU/IFU) involve a binding and goal-oriented cooperation between the business sector and public service.

These programmes are meant to stimulate close cooperation and development between a demanding purchaser (enterprise/government department) and one or several suppliers. There are several schemes linked to innovation

Box: Evaluation of the SkatteFUNN scheme

Statistics Norway has for several years been working on a comprehensive evaluation of the SkatteFUNN scheme. The final report from the evaluation process contains abstracts of all sub-projects, in which the main questions have been answered. In addition, the report considers possible adjustments of the scheme compared with the present scheme.

One objective of the evaluation was to find out whether the scheme has lead to more R&D, innovation and wealth creation. The results show a positive effect of the scheme on the business sector's R&D-related efforts. The scheme redeems more R&D in the enterprises and the return is positive. The effect is particularly positive for small enterprises without any special R&D experience. Another conclusion is that SkatteFUNN contributes positively to innovation. The most frequent result of innovation in projects benefiting from the scheme is a new product or a new production process. On the other hand, only a few projects result in new patents. In addition, the SkatteFUNN scheme has a positive effect on the productivity in enterprises. The scheme has proven cost-effective and it is used by many enterprises. The business sector is familiar with SkatteFUNN and on the whole, the enterprises are satisfied.

centers or regional business activity. SIVA is the name of a policy organ concentrating on developing solid and productive enterprises in rural areas by establishing/ improving national infrastructure to boost creativity and innovation.

In 2006, the three policy bodies Innovation Norway, the Research Council of Norway and SIVA established the new national programme Norwegian Centres of Expertise (NCE). The aim was to redeem and strengthen cooperation between interrelated processes of innovation and internationalization in clusters with high ambitions and great potential for growth. Cooperation with other enterprises as well as with research and educational institutions and public participants is a key element in the programme.

Another national programme for developing regional clusters and innovation systems is the Arena programme. Its goal is to increase wealth creation in regional business environments through strengthened interaction between participants from the business sector, academia and the public sector.

The Research Council's programme for Regional R&D and Innovation (VRI) aims at creating a general and strengthened research and innovation policy towards regional environments in order to establish closer cooperation between regional research institutes, university colleges and the business sector. All activities are to be carried out in close cooperation with Innovation Norway and the programmes Arena and NCE, as well as related policy instruments within SIVA.

There are various types of financing schemes especially focusing on risk capital. Argentum is a publicly owned investment company, which takes minority positions in specialized investment funds having an active ownership, so-called private equity-funds. Seed funds have been established, both regionally and countrywide, targeting investments in innovative enterprises in an early phase and with potential for growth. A scheme administered by Innovation Norway provides low risk loans used to partially finance investments in buildings, equipments, fishing boats and agriculture.

In february 2008 a new public investment fund was established as a subsidiary of Innovation Norway. The Fund (Statens Investeringsselskap AS) will be operative by the end of 2008. The Investment Fund's equity capital amounts to NOK 2.2 billion, whereof 0.5 billion is earmarked the marine sector. The Fund is to assist globally oriented and competitive projects, (mainly entrepreneurs) in the process of commercializing, by offering long-term and risk willing capital. The Fund should invest in start-up businesses where the access to such capital is difficult. The Investment Fund will contribute to increased wealth creation by performing equity investments and practice an active ownership in the projects. The Fund should prioritize the five target areas of economy chosen for their high growth potential; the marine sector, maritime sector, energy, environment and tourism.

Various schemes with an international focus are also available, such as the INT programme (Internationalization of new businesses within the technology-sector), The Guarantee Institute for Export Credits (GIEK), 108-scheme and The European Bank for Reconstruction and Development (EBRD).

The role of the Norwegian Design Council is to promote design as a strategically innovative tool in order to achieve greater competitiveness and profitability for Norwegian industries and businesses. As to research and applications within space industry, the Norwegian Space Center ensures national interests. The center is active in fields where Norway has a potential in the global market for space products and services. It is based on national resources, conditions and needs. Norwegian Space Center is a partner in e.g international programmes for observations of earth and in Galileo, the European system for satellite navigation.

Special target areas

The Government's Declaration from Soria Moria states that national strategies shall be developed in five key industries where Norway has certain skills, expertise or other advantages. The five sectors are the marine sector, maritime sector, energy, environment and tourism. Strategies for the maritime sector and tourism have already been published. Innovation will be a key element in all five strategies.

Maritime industry and shipping

The Government's vision is that Norway shall be a world leading maritime nation, and supply the most innovative and environmentally friendly solutions for the future. The Maritime Strategy *Steady as she goes – The Government's strategy for environmentally friendly growth in maritime industry* was therefore presented in October 2007. This Strategy presents five main challenges for the maritime industries:

- Globalization and framework conditions
- Environmentally friendly maritime industries
- Maritime expertise
- Maritime research and innovation
- Short sea shipping

The Strategy entails 54 measures that will be supported by an allocation of funds for research, innovation and measures to improve expertise of NOK 252 million in 2008. The responsibility for further work and follow-up of different measures in the maritime area is placed within the different ministries. A group of deputy ministers, chaired by the Ministry of Trade and Industry, will report to the Government on the progress of implementing the Strategy before the election in 2009.

The European Commission presented its plan of measures for the maritime industries through a blue paper on October 10, 2007. This project is linked to the EU's Strategy for Growth and Jobs, and aims to develop employment, growth and competitiveness in the maritime industries in a sustainable way. Norway has participated along with the member states in the process of preparing the blue paper, and will take part actively in the follow-up. Norway and the EU have several coinciding interests. Due to Norway´s significant position in maritime areas, we may contribute significantly.

Tourism

In December 2007, the Government presented their national strategy for tourism. The Strategy will provide for Norwegian tourism industry to create experiences that add value to local communities, enterprises, employees, the environment and visitors. The three main objectives in the Strategy are:

- Greater wealth creation and productivity in the tourism industry
- Sustainable rural communities through full-year jobs in tourism
- Norway - a sustainable destination

In order to achieve the main objectives, seven areas have been identified as in need of increased efforts; innovation, sustainable tourism, quality, expertise, destination development, marketing and organization.

As examples of important measures, a national scheme on quality assurance will be established and contributions to develop a nation-wide booking system will be given. NOK 16 million will be allocated to a research programme on tourism, and the Government will register Norway as member of the UN's tourist organization. A pilot project on developing sustainable destinations is to be initiated, and the possibilities to make use of national parks in a tourism context will be explored. The marketing of Norway as a tourist destination continues and increased cooperation in the tourism industry is encouraged. In 2008, budget allocations to Innovation Norway are increased to NOK 215 million, and are thus more than doubled from 2005.

The Government also invites the tourism industry to participate in a more formalized cooperation by establishing a strategic council on tourism. The Ministry of Trade and Industry will continue to have the formal responsibility for Norwegian tourism policy in close cooperation with other ministries. The Ministry of Trade and Industry strengthens the work on tourism by establishing a new section in the ministry related to this field.

Ownership policy

A multitude of owners, both private and public, and national combined with foreign, is considered an advantage for attracting equity and expertise to Norwegian business activities. The ownership policy of the Government, being a shareholder, is one of the political means to secure long-term and sustainable growth and industrial development of the companies. A main reason for state ownership is securing national ownership, national control of natural resources and national foundation of key industries in Norway.

The government's ownership policy is set out in the White Paper no. 13 (2006-2007) *An active and long-term state ownership*, and is communicated concisely in the document The Government's Ownership Policy, which was made public in June 2007.

The State's direct ownership in businesses represents an important element in industrial policy in Norway. The State's direct ownership is extensive and includes holdings in Norway's biggest listed companies like StatoilHydro, Telenor and Yara, and wholly owned companies like Statkraft and Statnett. In a wider context, the Norwegian state's investment management largely takes place through the Government Pension Fund. The state's exercise of its ownership is based on generally accepted principles for Corporate Governance and the division of roles set out in Norwegian companies legislation.

In the Government Ownership Policy the state has divided its ownership into the following categories depending on the goal for its ownership:

(1) Companies with commercial objectives
(2) Companies with commercial objectives and ensuring head office functions in Norway
(3) Companies with commercial objectives and other specific, defined objectives
(4) Companies with sectoral policy objectives

A division of the state's ownership interests into categories makes it easier to formulate expectations and measure performance. If the state is clear on what the goal for its ownership is, it is easier to evaluate whether the capital invested has been used efficiently. It also makes it easier for companies to define their main responsibilities, and to know when the owner's involvement is required.

The Government has communicated to the boards of directors that they should have high ambitions for the development of the companies. Companies with state holdings should be leading in the areas of Corporate Social Responsibility (CSR). Environmental concerns, gender equality and diversity in leadership, R&D and investment in human resources, local organizational adaptability, ethics and the work against corruption are important fields that must be attended.

The Government finds it very important to contribute to transparency around state ownership. One contribution is to help the boards of directors in their work by clearly setting out the state's expectations and goals as an owner. It also supports the financial development of the companies and the development of their activities in generally desired directions. Transparency is enhanced through the publication of general Government's Ownership Policy documents, annual ownership reports comprising the entire state's direct ownership managed by the ministries and annual ownership conferences organized by the Ministry of Trade and Industry.

Intellectual Property Rights (IPR)
The Government's Declaration from Soria Moria states that the Government will improve Norwegian patent policy, in order to enable us to safeguard patent rights in the same manner as competing countries. Norway therefore entered the European Patent Convention (EPC) in January 2008.

The most important government policy measure within the area of IPR is the Norwegian Patent Office, a professional body that processes and registers patents, trademarks and design in Norway. It is also engaged in extensive guidance, training and awareness-raising activities within the area of IPR, across the country.

Moreover, central government is providing, via the Renewal programme, considerable support towards meeting the patenting expenses incurred by the university technology transfer offices, regarding inventions originating from university research.

International cooperation
EU's new Competitiveness and Innovation Framework Programme (CIP), in which Norway participates, started in 2007. The programme ends in 2013 and is a continuation and improvement of nine earlier programmes. Norway also participated in several of these programmes. CIP comprises three pillars: The Innovation and Entrepreneurship Programme, The Energy Programme and the ICT Programme, where the firstly-mentioned accounts for the largest part (of CIP).

Norwegian participation in CIP contributes to strengthen innovation and competitiveness in our business sector. Through CIP, the Government will follow up and fortify cooperation with other European countries, in order to boost the business sector's ability to innovate. This also comprises research-related innovation. CIP is relevant to a large share of the Norwegian business sector because of the attention paid to SMEs. CIP can also be a tool to reach Norway's goal of being a pioneer in the area of environment, something that would give Norwegian enterprises a competitive edge and export possibilities. NOK 80 million is allocated to our participation in CIP in 2008.

2.2.2 Entrepreneurship

Many of the measures discussed under ICT development, streamlining, innovation and research will contribute to reduce the costs associated with entrepreneurship activities.

Through measures such as Bedin, the Narvik telephone and municipal front line services, potential entrepreneurs and already established enterprises are informed about the establishing and management of one's own business. Information is given on how to register, taxation rules, value added tax, accounting, the relations employer/employee and guidance of a more general character.

It is important that entrepreneurs increase their knowledge about drawing up business plans in

order to be more prepared when approaching investors and understanding market operations. Take-off/Instant start intensive courses are useful and give practical and theoretical knowledge in business planning. These courses connect public servants working in these areas, educational institutions, talented persons from the business sector and students with entrepreneurs.

Connect Norway is a corresponding concept, but concentrates on enterprises having advanced further in the development of their enterprises. Connect Norway aims to help entrepreneurs improve their business plans by connecting entrepreneurs with experienced people from the business community and potential investors. The goal is to make the business idea ready to attract investors and speed up the process of commercialization.

Entrepreneurship education and training
Young people of today will be the labour force of tomorrow and will thus be responsible for future wealth creation. Work and efforts are taking place on several levels in order to strengthen entrepreneurship education and training, both within the public educational system as well as in working life. Entrepreneurship has been included in the curricula and steps are taken to open up for cooperation with the private sector.

Research shows that students who have participated in entrepreneurship sessions at school, thus having become familiar with entrepreneurship thinking and activity, are more likely to start their own business after completing their education. In order to focus on these areas, the Government has worked out a strategy on entrepreneurship in education for 2004 – 2008, called "See the possibilities and do something about it!". The Strategy outlines a series of measures to reach the goal of "being the world leader on entrepreneurship in education".

A revised strategy plan on entrepreneurship education was presented in autumn 2006 attracting international attention. A large number of Norwegian university colleges and universities are offering entrepreneurship as a separate degree or part of a degree. Additional focus to strengthen entrepreneurship within basic education is prepared for.

The Government continues the cooperation with private players working to promote entrepreneurship in education, including Junior Achievement – Young Enterprise Norway (YA-JE Norway). YA-JE Norway establishes meeting places for schools and business sector, through which the students can participate in student businesses.

Female entrepreneurship
Women represent an important resource for start-ups, as Norwegian women have a high level of education and competency, and by contributing to achieving diversity. An Action Plan on Female Entrepreneurs has been drawn up. Its main objective is for women to constitute minimum 40 percent of all new entrepreneurs within the next five years. New financing schemes that focus on stimulating innovation and entrepreneurship amongst women have been established for this purpose. In its industrial policy, the Government will safeguard entrepreneurs and establish favorable social schemes by addressing the conditions self-employed faces with regard to combining a professional career with childcare.

2.2.3 Basic research and development

The Research Council of Norway is responsible for promoting basic research and user-driven research and innovation. The Research Council yearly distributes about NOK 5.4 billion on research-related activities. The allocations are dispersed on various policy instruments of which project support and backing of various programmes are the most important. The most important contributions from the Research Council are shared between project support and support allocated to various programmes. Independent project support is the main instrument to be used to ensure quality and innovation in basic research, independent of subjects and political guidance. Contributions linked to programmes are to be used primarily to build expertise and develop know-how on thematically defined areas where Norway has special needs or has special qualifications. In order to follow up important subjects or policies, the Research Council allocates contributions from its Great Programmes, which comprise transverse goal-oriented initiatives covering the whole range from basic to industrial research. The Research Council is also active in promoting international cooperation in areas of research.

An important instrument in order to increase the public financing of R&D is the R&D Fund. This Fund shall give grounds for a long-term and stable financing of R&D-related activities. Since the establishment in 1999, the Fund has grown considerably, and it was in 2008 replenished NOK 6 billion, bringing the Fund's capital up to NOK 66 billion.

To a large extent educational institutions are responsible for developing further knowledge and expertise within a wide area of subjects. R&D-related work carried out by university colleges and universities are financed mainly through the Ministry of Education and Research's budget and the Research Council. In addition, various private funding is allocated for use in these sectors.

Knowledge and expertise are essential to achieve high wealth creation. To ensure recruitment of scientific staff, a total of 350 new positions as scholarship holders will be established. These positions are to strengthen the education on master level as well as national priorities within the disciplines of science and regional development. To support recruitment of researchers to the business sector, a pilot scheme has been established in 2008 comprising scholarships associated with business-related doctorates in areas of technology.

In order to develop a better school, a thorough evaluation will be made of reforms introduced during the last years in Norwegian schools, based on new reports providing information on the current situation. Within higher education, a Quality Reform has been implemented and a committee has been appointed to evaluate the role of universities and university colleges with reference, among other things, to their contributions to the economic development of Norway.

In 2007 the Research Council established a series of centers for research-based innovation (SFI). The goal was to support basic research that promotes innovation and the competitiveness of the business sector. The SFIs shall stimulate cooperation between basic research communities in universities/ university colleges and enterprises with high levels of competence in areas of research. This scheme comprises a total public contribution to each centre of NOK 140 millions on average over a period of 5+3 years, in other words, public commitments of more than NOK 1 billion in total.

International research cooperation

Internationalization of Norwegian research is an important element in our research policy. Internationalization is of great significance to Norwegian research regarding quality, relevance and renewal. An active participation in the European research area is prioritized, in particular participation in EU's framework programmes for research, technological development and demonstration activities.

The EU's 7th Framework Programme for Research (2007 – 2013) is the world's largest international research programme as such, including a total budget of EUR 50.5 billion. The 7th Framework Programme shall contribute to making Europe a leading research area and to achieving the goals in the EU Strategy for Growth and Jobs. The programme is divided into four specific programmes: Cooperation, People, Ideas and Capacity. A new dimension in the 7th Framework Programme is the establishment of a European research council. This council shall finance pioneer research within all thematic areas as well as advanced technological breakthrough of great relevance to European research. The Norwegian subscription is totaling more than NOK 9 billion over the period, implying a substantial emphasis on the internationalization of Norwegian research.

2.3 Better regulation and public sector reforms

2.3.1 Better regulation

Better regulation and facilitation of procedures will encourage private initiative and create a business climate that is more conducive to wealth creation. It is necessary to enable businesses to dedicate the minimum time possible to certain types of administration. SMEs usually have little administrative capacity. Thus, better regulation is particularly important to them. Both nationally and internationally, better regulation and facilitation of public services is seen as means of improving the competitiveness of the business sector.

The Government is pursuing three main approaches in its effort to promote better regulation and facilitate maximum wealth creation for the business sector:

- Further development of Altinn, by making it the business sector's most important tool for simple and efficient dialogue with public administration
- Further development of the Orakel Competency Centre, by making it even more of a contributor in ensuring that decisions are based on good impact assessments of the business sector.
- Implementation of well-targeted measures for better regulation, based on a survey of the business sector´s administrative costs when complying with regulatory framework.

An extensive project to improve regulation for the business sector has been initialized. Its purpose is to register the time and money spent by a business

fulfilling the requirements of information demanded by the authorities. The survey will be completed this year and will serve as a reference for further initiatives of simplification.

2.3.2 Reforming and renewing the public sector

A well-functioning public sector of good quality offers security and opportunities, and represents a competitive advantage for the business sector.

In October 2007 a strategy on reforming and renewing the public sector was introduced. The Strategy is ideological and political, and represents a key element in the work to improve the public sector. Among various contributors to the final document are ordinary citizens, having participated through statements from voluntary work groups and citizens' conventions.

The Strategy to renew public sector is founded on the following principles:

- A public sector taking a leading position. This implies being a responsible consumer, a social participant of high ethical standards, having a versatile workforce, and being innovative in adjusting the services to a changing population.
- Increased participation and involvement of citizens. New meeting places will be set up, where citizens may promote their suggestions and point of view on the public sector. In this way, information concerning the activities of the public sector will be of easy access.
- "Norway on net" – electronic services for all. Modern channels of communication, equipment and assistance on how to use public electronic solutions should be accessible for all.
- Simple for all citizens. Communication to citizens should be formulated in an easily comprehensive manner, emphasizing what a decision implies and the reasoning behind, where to find additional information, and also where to file a complaint.
- Improvement where most needed. Improvement of organizational and technical coordination would enhance welfare. Welfare arrangements are to be regarded in connection with each other.
- Promote wealth creation. The primary channel for business life's communication with the public sector should be by electronic means. Compliance to regulations should be facilitated, as well as acting properly and responsible when hiring labour from abroad.
- Quality and efficiency. The citizens' experience with public services shall be emphasized. In order to estimate if the quality is proportional to the contribution, the services offered to the citizens will be well documented. Extended use of electronic solutions within the public sector could improve cost-efficiency and in addition, raise the quality of services supplied.

2.4 ICT

To increase wealth creation in a knowledge society, it is important that the business sector explores the opportunities offered by ICT. This may increase productivity and improve the competitiveness of the economy. ICT is central in the development of better public services and efficiency enhancement in the public sector.

Norwegian policy is aligned with the EU objectives under the new ICT policy strategy *i2010*, which has been designed to support the realization of the objectives of the EU Strategy for Growth and Jobs.

Norway's current ICT policies are described in the White Paper no. 17 (2006-2007) *An Information Society for All* (The ICT Report). An important point in the report is the need for joint solutions and coordination across public institutions. This may benefit the users of public services due to simpler and better public services, and at the same time reduce costs. The ICT Report emphasizes the goal that everyone should be able to participate in the information society, and that ICT should be used to reduce inequalitites in society.

The Action Plan *eNorway 2009* is also a central part of Norwegian ICT policies. The Action Plan has three targeted areas: (1) The individual in a digital Norway, (2) innovation and growth in the business sector, and a (3) coordinated and user-adapted public sector.

2.4.1 Promoting the expansion of broadband

Broadband access throughout the country is an important prerequisite for developing of the business sector in rural areas and for renewing the public sector. The increased funding of broadband expansion in 2007 will be followed up in 2008, and the coverage of broadband in Norway is now close to 100 percent.

The HØYKOM program has been the Government's main tool for promoting both the diffusion and the use of broadband in rural areas. HØYKOM shall develop and implement projects and convey knowledge to further Norway's position in innovative use of ICT and broadband services in all parts of the public sector.

2.4.2 ICT research

According to the ICT Report, the Parliament will increase the funding for ICT research.

Through the VERDIKT program, Norway shall become a leading player in the development and implementation of technology and knowledge for ICT-based innovation and commerce. The duration of the program is 2005 to 2014. The Norwegian Research Council expects the program to contribute to wealth creation and competency development that promotes the knowledge society and the knowledge economy.

2.4.3 Increasing the use of ICT in public services, SMEs and households

The public sector is capable of promoting social development. It should therefore take the lead in using ICT to improve public services. An initiative from the public sector in this area may also increase the competitiveness of the Norwegian business sector.

State institutions and organizations

A new directorate for administration and ICT was established January 1st, 2008. The directorate will improve the capability to work with ICT and renew the public sector. It will also promote learning across government administrative units.

The National Competence Centre for Free Software, which was created in August 2007, is another new initiative. The Competence Centre shall promote renewal in the public sector and stimulate innovation in ICT firms.

Portals

The business sector's service portal Altinn is central in the work on simplifying daily routines of average businesses. Altinn was created in 2002, and is the governmental portal for electronic dialogue with the business sector. Altinn's objective is to be the business sector's portal to all public services. In 2008, Altinn shall contribute to make interactive services and information on relevant regulations for businesses more available.

The public support system for innovation and business development will from now on have a joint service portal in Altinn. Developing a common portal is an important step towards coordinated public services, and will provide information on public support arrangements to industry. The information will focus on public instruments within industrial research, business activities and internationalization, both in Norway and the EEA. The portal will contain instruments administered by about 20 different organs.

For households, a citizen portal named MinSide (MySite) aims at making more public services available at one location. MinSide will function as a user-friendly entrance point to the official Norway for the country's citizens.

As an another step to simplify daily routines for users of public web services, the Government wants to develop a common electronic ID solution for the public sector. This measure is meant to reduce the amount of user names and pin codes that are needed to use web-based public services today. Founding is granted for 2008.

Programs

Innovation Norway has an IT-program (BIT) targeted towards individual industries. The program aims at increasing the competitiveness and innovative ability of SMEs through more efficient electronic business.

2.5 Competition policy

Competition may lead to a more efficient use of society's resources. In markets where the Government wants competition, the competition authorities shall lead an active competition policy in order to ensure reasonably priced and quality goods and services for the consumers. The competition authorities shall also point at anti-competitive effects of public regulations and propose measures that could reduce the damaging effects as much as possible. The cross-sectoral instruments in the competition policy include the competition legislation for businesses, the regulatory framework on state aid and the regulations on public procurements.

2.5.1 The Competition Act and the Norwegian Competition Authority

The competition rules for businesses are included in the EEA Agreement, Articles 53, 54 and 57 and protocol 14.

The current Competition Act entered into force in 2004 and gives the Norwegian Competition Authority efficient instruments in their work to expose and sanction conducts that restrict competition. The Competition Act prohibits inter-enterprise collusion that limits competition as well as the abuse of a dominant position. Moreover, the

new Act enables the Norwegian Competition Authority to impose administrative fines in case of infringements of the provisions of the Act, or in case of failure to comply with orders rendered by the Authority. In February 2007, the Norwegian Competition Authority imposed a fine of 45 million NOK on the company Tine for the abuse of a dominant position and inter-enterprise collusion restricting competition. Tine has decided to try the case in court. This and other future cases will clarify where the limit should be drawn for abuse of a dominant position.

A notification obligation in respect of business concentration has been introduced, which gives The Norwegian Competition Authority the possibility to oversee structural changes in the industry. After an evaluation of the notification obligation, the threshold-values were increased from January 1st, 2007.

The Competition Act of 2004 involves a stricter delineation between competition considerations and other considerations than the former Competition Act. The Norwegian Ministry of Government Administration and Reform recently concluded a hearing of a proposal to change Section 21 of the Competition Act on cases involving a matter of principle or that are of major importance for society. The proposal is based on a desire to simplify the procedure in cases where an intervention against a business concentration is set aside or altered as a consequence of other social considerations than competition.

2.5.2 State aid

State aid is governed by Article 61 of the EEA Agreement. The state aid rules form part of the competition rules under the Agreement, and they are intended to contribute to players in the internal market facing predictable competition and other general conditions throughout the EEA. By controlling state aid through a joint regulatory framework, one also prevents the mutually escalating granting of subsidies on the part of the countries.

In October 2007, the Government published a guide on "The EEA Agreement's rules on state aid". The Guide intends to make information about the set of rules clearer and more easily accessible. It is mainly directed at public authorities, but also contains much relevant information for businesses considering applying for state aid.

2.6 Promoting sustainable development and the environment

The global climate and environmental changes are challenges that require international cooperation. The total allocations to environmental policy measures in the 2008 budget are estimated to NOK 24.6 billion.

2.6.1 Prioritizing energy-efficient consumption, and the development of clean energy sources and environmental technology

To meet an expected increase in the demand for energy, it is necessary to exploit existing energy sources better, and also to develop new energy sources. Norway faces these demands by, among other things, focusing on research and development of new renewable energy sources, in addition to concentrating on environmentally friendly and efficient use of energy.

The development of new environmental technology will be important in order to untie the connection between economic growth and environmental impact. The development of new environmental technology will yield gains for the environment, and can also lead to economic growth and employment in Norway. In 2008, a white paper on innovation will be published, in which future initiatives on environmental technology will play a central part. Furthermore, Norway follows up on the EU Environmental Technologies Action Plan (ETAP).

As to developing new environmental technology, Norway is already at the forefront in several areas. The development of energy-efficient buildings, environmentally friendly ship technology, solar energy, waste and recycling solutions, water supply and sewage technology, as well as numerous innovations within the oil and gas industry, are relevant examples.

Enova SF was established in 2001 to contribute to achieving an environmentally friendly shift in energy use and energy production in Norway. In 2008, the Government increases the efforts to promote energy efficiency enhancement as well as heating and electricity from renewable energy sources. Through Enova, the total funding of measures with this purpose amounts to almost NOK 1.5 billion.

Gassnova was established in 2005 as the national centre for environmentally friendly natural gas technology. Gassnova became a public firm from January 1st, 2008, and NOK 60 million is allocated to its administration in 2008.

Norway also participates actively in international cooperation, e.g. with the EU, on developing efficient CO_2 handling technologies. Also, around NOK 1.1 billion is allocated to research, technology development and capture, transport and storage of CO_2. The CO_2 handling at Kårstø and Mongstad, management of Gassnova SF and the CLIMIT-program (CO_2 handling technology for natural gas) are prioritized projects in this area.

2.6.2 Prioritizing the internalization of external pollution costs

The polluter-pays-principle is important in environmental policy, and it implies that the polluter faces the costs that his/her harmful emissions cause society. This gives incentives to rearrange production, in order to make it less emission intensive.

In light of this principle, several environmental taxes are introduced in Norway. As far as polluting emissions to air are concerned, taxes have been levied on sulphur and NO_x, and also on the greenhouse gases CO_2, methane, HFC and PFC.

Furthermore, taxes are introduced to contribute to the environmentally sound treatment of packaging and other waste, chemicals with detrimental health and environmental effects, as well as taxes on fuels. In the 2008-budget, the CO_2 tax on mineral oil for domestic air traffic, the tax on heating oil, and the auto diesel gas tax are increased. In addition, the taxes on vehicles are changed in an environmentally friendly direction through an environmental differentiation of the vehicle license fee and an increase in the scrap vehicle deposit for diesel vehicles that are strongly pollutive.

Research and monitoring

Environmental monitoring and statistics give a basis for setting goals in the environmental policy, to consider to what extent national environmental goals are achieved, and what effects are achieved through policy instruments and initiatives. Key research programs include research on climate, biodiversity, cultural monuments, chemicals with detrimental health and environmental effects, and the Barents Sea. In order to increase knowledge on climate changes and environmental poison in the Arctic, the international work on monitoring the environment in the Arctic is strengthened. In addition, it is planned to start aerial photography on Svalbard in 2008.

Environmentally conscious public procurement

Each year, the public sector procures goods and services for about NOK 275 billion. Of this, the Central Government alone represents around NOK 100 billion. The public sector being such a significant player can influence the environmental impact of various goods and services. Environmentally friendly procurements can contribute to promoting an efficient public sector and stimulate the development of environmental technology and environmental effective products, and thereby contributing to a competitive business and industry. An action plan on environmental and social responsibility in public procurement was published in the summer of 2007. The Action Plan contains concrete initiatives to facilitate demand for environmentally friendly goods and services produced under high ethical and social standards. The areas of climate and energy, chemicals with detrimental health and environmental effects and biodiversity are prioritized. As part of the Action Plan, a separate environmental policy with specific requirements for governmental procurements is drawn up. It became operative on January 1st, 2008.

2.6.3 Working to halt the loss of biodiversity by 2010

Biodiversity is threatened in many ways. The most important reasons for the loss of species and life forms appear to be physical encroachment, changed land use and climate change. Therefore, new measures are brought into action to preserve natural resources, outdoor life and cultural monuments, as well as measures concerning the use, care and management of protected areas and recreation areas.

2.6.4 Continuing the battle against climate change. Implementing the Kyoto Protocol and EU-ETS

Global warming as a consequence of man-made climate change is the biggest environmental challenge that the earth is facing. The challenge requires a global solution. Therefore, Norway will work for an ambitious international climate agreement that includes most countries.

All emissions of greenhouse gases have the same environmentally damaging effect, independent of where the emissions occur. At the same time, industrialized countries have a special responsibility to contribute to the reduction of emissions, both because they have had the largest emissions so far

and because their economic premises are better. Against this background, Norway should take on a special responsibility to contribute to global emission reductions.

The White Paper on Norwegian climate policy and the Government's Climate Agreement with the opposition parties in the Parliament

The Government presented its White Paper No. 34 (2006-2007) *On Norwegian climate policy* in spring 2007, where the general objectives and strategy for the climate policy are indicated. The prevailing objective in UN's climate convention is to stabilize the concentration of greenhouse gases in the atmosphere at a level that prevents a dangerous human impact on the climate system. Last year, the Government decided on a target to limit greenhouse gas emissions so that the global temperature increase does not exceed 2°C compared to pre-industrial levels. The IPCC's fourth assessment report estimates that a global temperature rise of 2.0-2.4°C will require CO_2-emissions in 2050 that are 50-85 percent below the 2000-level. Norway will contribute substantially to global cuts in both industrial countries and developing countries.

On the 17th of January 2008, the Government and the opposition parties agreed on the main line for a long-term climate policy that can be independent of changing governments. The agreement implies the following targets:

- Norway shall be carbon neutral in 2030, if an ambitious and global climate agreement is signed. Without such a commitment, Norway shall be carbon neutral in 2050
- Norway shall until 2020 undertake a commitment to reduce global emissions of greenhouse gases equivalent to 30 percent of Norway's emissions in 1990
- Norway shall intensify its Kyoto commitment to nine percent below 1990-level

The Government has a tripartite strategy to achieve these goals. A wider international climate commitment is the most important element in the climate policy. Secondly, Norway must contribute to emissions reductions in developing countries and fast growing economies like China and India. At last, Norway must intensify the effort for emissions reductions.

The Government will work for an ambitious international climate agreement that includes most countries. Large and increasing international efforts to reduce the emissions of greenhouse gases will contribute to an increased price on emissions over time, because greater efforts imply a more stringent commitment with less emission allowances for disposal. Expectations of an increasing carbon price will affect investment decisions in business life already today. Therefore, it is important to form credibility around a wide international work for reducing greenhouse gas emissions. Measures for reducing greenhouse gas emissions in developing countries yield a greater climate effect for a given amount of money since it is cheaper to implement measures there than in industrialized countries. In addition, these measures can contribute to economic growth and sustainable development in the host country.

In the White Paper on Norwegian climate policy, sectorial climate act plans are also presented. The main objective with these plans is to identify new policy instruments that yield cost efficient emission reductions in each sector, reductions that are not carried out with today's policy instruments. The Government will especially evaluate measures that are cost efficient in light of an expected increasing carbon price over the investments' lifetime and which are not necessarily triggered off by today's policy instruments use. Hence, measures that contribute to technological development will be considered in particular.

The Government's agreement with the opposition parties in the Parliament implies, among other factors, giving higher priority to research on renewable energy and to public transport and measures to reduce the emissions from transport, as well as increasing taxes on auto diesel and gas. This agreement also means that about 2/3 of Norway's total emission reductions will be national.

Emission trading and measures against deforestation

The EU's ETS Directive is embodied into the EEA Agreement. The emission trading system will be an important part of the national climate policy in the first commitment period (2008-2012) and will cover more than 35 percent of the greenhouse gas emissions on Norwegian soil. Norway became a participant in the EU-ETS (European emission trading system) for the period 2008-2012 on January 1st, 2008. Norway will bring fewer allowances into the emission trading system than the total emissions from Norwegian companies, and thereby contribute to tightness in the EU system.

Cross-sectorial economic policy instruments lay a foundation for decentralized and cost-efficient measures where the polluter pays. After Norway connected to the EU-ETS (January 2008), around 70 percent of the national emissions are subject to imposed emission allowances or CO_2-tax. Still, some emission sources can be imposed neither emission allowances nor CO_2-tax. In these cases, the Government will use other policy instruments to reduce the greenhouse gas emissions.

In 2008, the Government will buy allowances for NOK 500 million. In prospective years, it has been authorized to conclude contracts with delivery and payment amounting to maximum NOK 3.6 billion. In addition, the Norwegian authorities will buy allowances from licensed CDM and JI projects around the world. In fall 2007, the Ministry of Finance established an internet portal for potential opposite parties in the market for allowances. In this same period, there was a bidding round through this portal for CDM allowances where the Ministry was the buyer.

Norway also wants to play an active role to ensure international support for measures against deforestation in developing countries. Norway is therefore prepared to increase the annual funding of measures against deforestation in developing countries to around NOK 3 billion. The prerequisite is that satisfactory mechanisms are established in order to certify and handle large transactions for forestal measures in a safe way, as for instance by the UN or the International Bank for Reconstruction and Development.

2.6.5 Promoting the sustainable management of chemicals and halting discharges of environmentally hazardous substances

The Government wishes to ensure that wealth creation in Norway takes place without emission of toxic chemicals. The use and emission of environmentally hazardous substances should be phased out, to the extent possible, by 2020. A key policy measure is the European regulatory framework for the Registration, Evaluation and Authorization of Chemicals (REACH), which is incorporated in the EEA Agreement. REACH ensures a high level of protection for health and the environment and contributes to halting, as far as possible, the discharge of environmentally hazardous substances.

2.6.6 Long air pollution

The NO_x commitment under the Gothenburg Protocol is one of the major challenges facing Norway over the next few years. In order to meet Norway's commitment[1], a NO_x tax of NOK 15 per kilogram emissions was introduced on January1st, 2007. The tax comprises emissions from larger engines and from large stationary sources. The tax is above all expected to reduce emissions from ships and fishing vessels through purification and conversion to natural gas.

The Government has allocated a compensation system for the most affected industries. The so-called NO_x-RED-system was introduced for the fishing fleet and shipping in the fiscal budget for 2007 and implies that the State allocates investment aid for emission-reducing measures. In addition to the compensation system, the appropriation for research and development has been increased to stimulate development of NO_x-reducing technologies.

An agreement in the Parliament´s budget procedure for 2007 laied the foundation for an environmental agreement between the Government and businesses that are obliged to pay a NO_x tax. It was decided to give the affiliating businesses exemptions from the NO_x tax if a NO_x-agreement was established. In January 2008 an agreement was reached between the Ministry of Environment and 14 sectoral federations about measures for reducing NO_x emissions (The NO_x agreement). The agreement, which was signed in May 2008, commits the businesses to cut emissions by 31,000 tons.

The affiliating businesses are committed to pay a contribution to the Industry's NO_x Fund. The Fund will subsidize businesses that implement cost-efficient NO_x-reducing measures. The Fund will be finaced by payments from the affiliating businesses according to their emissions. The rate of payment per kilogram NO_x is decided by the Fund itself. In addition to significantly redusing costs, the agreement is assumed to give increased certainty about actual emission reductions.

The Ministry of Environment has sent a notification to the EFTA Surveillance Authority – ESA. It is the tax exemption that has to be notified[2]. As a consequence of the NO_x-agreement, the Government has proposed in the Revised National Budget for 2008 to draw back the budget appropiation for NO_x-Red for 2008 and 2009. In addition the Government has proposed to reduce

1 NO_x-emissions of maximum 156,000 tons by 2010
2 The tax exemption was approved by ESA 16 July 2008

the appropiation to maritime developement with NOK 10 million for 2008.

2.6.7 The Strategy for Sustainable Development

During the presentation of the National Budget 2008, the Government presented Norway's Strategy for Sustainable Development. The Strategy replaced the previous National Strategy for Sustainable Development that was presented by the Bondevik Government in the National Budget 2004. The Strategy provides guidelines for the work on sustainable development by the Government, local authorities, companies and individuals. The Strategy is divided into seven themes:

1. International cooperation for sustainable development and fight against poverty
2. Climate, the ozone layer and long-range air pollution
3. Biodiversity and cultural monuments
4. Natural resources
5. Chemicals with detrimental health and environmental effects
6. Sustainable economic and social development
7. Environmental and resource management from a Sámi perspective

The Strategy contains an analysis in each subject area of the situation today and describes challenges ahead. In the wake of this, the Government's main goal for the different subject areas is explained. Finally, the Government's policy and use of policy instruments are described more in detail.

The Strategy uses the same definition of sustainable development as the World Commission on Environment and Development in 1987: "A sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." This definition has wide international acceptance.

Sustainable development is on the agenda both in Norway and in other countries as well as in international forums. The backcloth is that more and more see the persistent poverty in many countries at the same time as the pressure on the earth's eco-systems increases. The richest parts of the world population weigh down the environment and resources, so that an increase in prosperity for the rest is not possible without crossing the threshold for the environment.

The Strategy explains the principles that the Government rests on to achieve sustainable development:

- Fair allocation – internationally and within each country
- International solidarity
- The precautionary principle
- The polluter-pays principle
- Common effort

The UN's Millennium Development Goals

In 2000, the UN decided on targets in the fight against world poverty:

- Halve the proportion of people living on less than a dollar a day and those who suffer from hunger
- Ensure that everybody completes primary school
- Eliminate gender disparities at all levels by 2015
- Reduce by two thirds the mortality rate among children under five
- Reduce by three quarters the maternal mortality ratio
- Halt and begin to reverse the spread and incidence of HIV/AIDS, malaria and other major diseases
- Ensure an environmentally sustainable development
- Develop a global partnership for development

Most of these targets have dated and definite sub-targets and indicators. The Government supports the targets and has, by the formulation of its strategy for sustainable development, aimed at contributing to reaching these targets.

Using indicators

The Government has selected 18 indicators to measure whether the developments within the different subject areas are in the desirable direction. It is explained how the indicators are measured, and an analysis of how they develop is given. The indicators are subject to an annual update by Statistics Norway. Most of the EU countries have developed their own national strategies for sustainable development, including their own indicators. The EU also has its own strategy. In addition, the Nordic Council has its strategy for the Nordic countries, and Norway, in line with the other Nordic countries, supports this Strategy.

The indicators do not necessarily explain the total development within each area. However, there is no doubt that they reveal the main trend in prioritized areas and contribute to increasing the attention around the policy.

2.7 Transport and communications

Transport and communications are vital conditions for industrial development and regional settlement. Costs of transportation are high for Norwegian businesses, compared to many other countries, due to the fact that Norway is a country with large distances between markets. The transport policy shall contribute to a reliable and efficient transport system and thereby increase the competitiveness of Norwegian businesses, taking into account matters of environment and security. Enterprises will have increased possibilities for growth with a well functioning infrastructure. Thus, infrastructure is a central condition for growth and an important measure for industrial policy.

In the fiscal budget for 2008, NOK 24.7 billion are reserved for transport and communications. Main areas include railways, road and air travel.

2.7.1 Priorities in transport

In the development of transport infrastructure in Norway, considerable weight is attached to the measures included in Trans-European Transport Network (TEN-T). TEN-T was established by the EU in 1996 with the aim to strengthen economic competitiveness, and to contribute to a balanced and sustainable development in the EU. In conjunction, guidelines for different parts of the transport sector were defined.

In Norway, TEN-T primarily encompasses the European roads and most of the railway network and the airports. The Nordic Triangle (the main links between the Scandinavian capitals) is the only project prioritized under TEN-T that includes Norway. Of particular interest to Norway are the links from Oslo to Stockholm and Gothenburg, including the Oslofjord link.

EU's shipping policy is to a considerable degree focused on measures for realizing the potential of short sea shipping. Norway participates actively in this effort. Short sea shipping was included in TEN-T in 2004 through the introduction of the concept of "Motorways of the Sea" (MoS). TEN-T is included in the EEA Agreement, but the Agreement does not cover the financial aspects thereof. General long-term transportation planning in Norway is focused on the preparation of the National Transport Plan (NTP). The NTP attaches considerable weight to transport corridors, which mainly include main roads and railroad networks. These are also central to TEN-T. NTP covers a ten-year period, with emphasis on the first four years, and with revisions of the plan every four years. The next revision covers the period 2010-2019, and will be presented ultimo 2008.

Norway also participates in the Marco Polo II program, which operates from 2007 to 2013. The aim of this program is to provide support for enterprises that make use of new and more environmentally friendly modes of transport. In this way, traffic is to gradually shift from road freight traffic to more environmentally friendly short sea and railway transport. At the moment, Norway is leading a multinational project, Short Sea XML, which receives grants from the program.

2.7.2 Public-Private Partnership (PPP)

Through the deliberation of White Paper No. 46 (1999-2000), *National Transport Plan 2002-2011*, the implementation of three pilot projects for PPP (Public-Private Partnership) was planned. The PPP model entails a company being given the responsibility for the financing and construction, as well as the operation and maintenance, of a road for an agreed and fixed period of time. Unlike regular toll road projects, the main reason for choosing PPP is not alternative financing, but rather the opportunity to realize gains in the form of more efficient construction, as well as future operation and maintenance, of the road.

The White Paper No. 24 (2003-2004), *National Transport Plan 2006-2015 (NTP)*, includes a discussion of the experience with PPP so far. As pointed out in the NTP, advantages from using PPP can be better optimized operating costs, economies of scale, swifter completion of the projects, and the transfer of risk. This needs to be contrasted with higher financial costs, higher budget commitments and more complex contracts.

2.7.3 Post and telecommunications

In Norway, households and enterprises throughout the country should have equivalent access to basic postal services and telecommunications of high quality and at reasonable prizes. An important measure in order to achieve this is to lay the foundation for the development of effective and sustainable competition in the markets for postal services and telecommunications.

2.8 European policy

The European Union is Norway's main trading partner. Pursuant to the Agreement on the

European Economic Area (EEA), Norway has access to EU's internal market (the single market). This is quite important for Norwegian business life. The internal market, with free movement of goods, services, people and capital, is thus expanded to comprise all the EEA. This secures equal treatment for workers and students, and better general terms for Norwegian businesses. Harmonizing regulation on competition, state grant and public procurement secures equal conditions of competition within the single market. An internal market provides for an efficient use of resources, and increases wealth creation.

2.8.1 Goods

The internal market shall ensure that goods can circulate freely within the EEA. Restrictive trade measures relating to imports and exports are prohibited.

Two mechanisms define the internal market framework. The principle of mutual recognition has been developed through case law, and implies that a product lawfully manufactured and marketed in one EEA state can be freely marketed in the other member states without additional testing and control. The other mechanism, harmonization of product requirements, is common regulation negotiated in the EEA. Products included must fulfil the basic requirements on health, security and environment, generally elaborated in European standards. Products manufactured in accordance with the harmonized regulation may be given the CE-mark, which ensures free movement of the product within the single market.

To avoid application of national rules that do not comply with the EEA Agreement, proposals for new technical regulation is to be circulated for comments within the EEA.

In February 2007, the Commission proposed several measures to improve the internal market for goods (The Goods Package). The aim is to stimulate trade in goods within the single market. By coordinating national legislation, cross-border marketing of products within the EEA will become simpler, also taking into account consumer interests. Products traded in the single market should be safe and in accordance with harmonized regulations. New rules on market surveillance are to improve the control that products are in conformity with the basic conditions. By removing products that are not in conformity with the regulation, equal conditions of competition and consumer trust in the market are secured.

In order to expand the internal market, the Ministry of Trade and Industry and the relevant ministries from the other EFTA/EEA states collectively conclude agreements on mutual recognition of conformity assessments and test methods with states outside the EEA. This is accomplished in parallel with the EU. The purpose of these agreements is to remove barriers of trade and to expand the internal market.

2.8.2 Services

The service sector constitutes about 70 percent of wealth creation and generates 70 percent of the employment in Europe. It is mainly within the service sector that new employment is being generated. The trade in services, however, accounts for 20 percent of overall trade within the EU. Surveys have shown that there are a number of obstacles within the internal market, affecting both permanent establishment and cross-border trade in services. Two examples are discriminatory rules and long processing time. The difficulties in dealing with the obstacles are in particular experienced by small and medium-sized enterprises.

This was the motivation for a new directive on services. The purpose of the Directive is to facilitate trade in services and to make it easier to start up business within the EEA. The European Commission considers the Directive to be a key element in realising the objectives of the Strategy for Growth and Jobs, given that a better functioning internal market for services may contribute to economic growth and new jobs in the EU.

Pursuant to the Services Directive, the member states are obliged to increase administrative collaboration in order to secure a better and more efficient surveillance of businesses. As a consequence, the Internal Market Information System (IMI), an electronic information system, has been developed. It will provide for national authorities to exchange information in a direct and efficient manner.

2.8.3 New strategy for the internal market

On November 19, 2007, the European Commission presented the Single Market Review. The objective of this package of initiatives is to modernize the internal market. It aims at enlarging the Europeans' benefit from globalization, empowering the consumers, improving market access for small enterprises, stimulating innovation and contributing to higher social and environmental standards.

The Commission finds it important to improve the implementation and the compliance of the regulations in the single market. It is a general request that consumers' rights are provided for when they do business within the single market. This can be done by e.g. establishing a right to file cross-border complaints and providing consumers with better information through "Internal Market Centers". Moreover, the Commission suggests better food labeling, easing cross-border changes of bank, simplification of SMEs access to funding, better regulation and improvement of the access to public procurement. Finally, the Commission calls for a speed up in the patent proceedings and to establish a "research passport" to enhance the mobility of researchers in Europe.

2.8.4 Enforcement of EU rules concerning public tenders

The regulation of public tenders has two main goals; to secure commercial equality of contractors and also to improve the use of public funds through cost-effective purchases. A new law on public procurement entered into force on January 1st, 2007. Its objective is to simplify regulation as well as implementing two new directives. The new provisions give legal basis to fine an infringement charge to employers that, with intention or gross negligence, have carried out an illegal purchase.[3]

The Appeals Board for Public Procurement (KOFA in Norwegian) has been operational since 2003. Its aim is to provide the contractors with a rapid and inexpensive opportunity to appeal in a low level of conflict. KOFA is to contribute to raised competence and legal clarification within its legal area. In 2006, the Ministry of Government Administration and Reform produced an evaluation report on KOFA. The evaluation demonstrated that the system has been succesful. According to the majority of those asked, KOFA is in line with the aim of its establishment.

A triennial action plan (2007-2010) on environmental and social responsibility in public procurement is to contribute to setting the public authorities in front as a responsible consumer. This will be accomplished by demanding products that are environmentally friendly and services that are supplied according to "high ethical and social standards".

2.8.5 Norwegian influence in the EU

In order to achieve influence and acquaintance with the work in progress in the EU, information is an important tool. A work on increasing the competence in the Government administration on the EU and the EEA has been initialized. This is a follow-up of the White Paper No. 23 (2005-2006) *On the Implementation of the European Policy*. By the end of 2007, eight strategy plans were produced and published on the European portal www.europa-portalen.no. All ministries are to draw up working plans in order to identify the priorities for Norwegian participation and achievement in the internal market.

In order to support the work on information about European questions, relevant governmental grants will increase in 2008. Moreover, the social partners participating in EEA work will receive grants to research on European questions and to travel. NOK 1.6 billion have been earmarked for the EEA funding scheme. These financial resources support projects and other initiatives on environment, energy, cultural heritage, health and children, research/education, and also the administration of justice in the 15 EU member states. The bilateral joint program regarding Romania and Bulgaria is in particular focused on environment, climate and energy.

2.8.6 Internal market issues – Networks for problem-solving

It is an objective that problems businesses or citizens run into in the internal market are solved in an easy and informal manner. As a consequence, the Commission has created two networks:

SOLVIT was established in July 2002 in order to remove existing barriers in the internal market. In SOLVIT, the EEA member states cooperate to find solutions to problems caused by a public authority having applied the regulations on the internal market incorrectly. When a case is reversed, it is due to national authorities reversing their decision. SOLVIT holds no power of decision. However, in 80 percent of the cases handled by SOLVIT, national authorities have reversed their decision. The Ministry of Trade and Industry is the SOLVIT centre in Norway.

SOLVIT handles problems concerning internal market questions. Cases that have been processed in the network are, among others, market access

[3] Defined as illegal direct procurements and omittance of required protocolling for procurements above NOK 100,000

for products and services, taxation, establishment as self-employed, free movement of capital or payments, public procurement, residence permits and employment rights, and recognition of professional qualifications and diplomas.

The Enterprise European Network (EEN) was established in 2008 as a part of the Competitiveness and Innovation Programme (CIP). In principle, EEN will continue the work previously done by the Euro Info Centre network. EEN is a European network of approximately 300 information offices and advisory services, coordinated by the Commission. In Norway, Innovation Norway manages the network.

The EEN offices are to assist SMEs by providing information and contacts in questions concerning EEA economic life/business activities. Also, they will assist in finding and interpreting EU/EEA regulation, guidance to EU-programmes, monitoring public procurement and assisting businesses to find European cooperating partners. In addition, EEN works on European business policy and pass on information about new developments in EU, both in the legal and the political area.

2.9 Measures to ensure access to international markets

In order to maintain and develop an active business sector in Norway, it is important for Norwegian enterprises to have good access to foreign markets. High economic activity and secure jobs in export-oriented industries are based on good market access abroad.

Norway has considerable foreign trade, and it is in our interest to contribute to the development of the rule-based multilateral trade system. The EEA agreement constitutes the main pillar for Norway's trade relation with the EU. The World Trade Organization (WTO) is important for our trade relations with the rest of the world. Norway is actively participating in the Doha Development Agenda negotiations and it is in our interest that the negotiations are concluded as soon as possible, both with regard to Norwegian economic interests and the credibility of the multilateral trading system.

Norway seeks to promote trade with foreign countries through the WTO Agreement, the EEA Agreement and EFTA's Free Trade Agreements (FTAs). As a starting point, Norway prefers multilateral trade agreements to arrangements between two or a few countries. Bilateral trade agreements are, however, a useful supplement to the multilateral agreements of the WTO. Through EFTA, Norway is presently engaged in negotiations with important trading partners.

Norway and the other EFTA states give priority to concluding free trade agreements with countries where an agreement can provide maximum impetus to increased trade. In 2008, a FTA was concluded between the EFTA states and Canada, Norway's third largest trading partner after the EU and the US. EFTA also gives precedence to the growing markets in Asia, and prioritizes trade relations with India and Russia. Furthermore, Norway will embark on negotiations on a bilateral FTA with China. In addition, EFTA is currently negotiating FTAs with countries such as Algeria, Colombia and Peru.

2.10 Labour market policy

Labour market policy is a key element of EU's Strategy for Growth and Jobs. It aims at "achieving full employment, improving quality and productivity at work, and strengthening social and territorial cohesion" in the EU.[4] The Norwegian labour market policy also shares these aims as they are of great importance for Norwegian wealth creation.

There is a great potential value from better utilization of the human resources in the population. Although the employment frequency[5] is relatively high in Norway, the employment ratio fell from 2000 to 2005, i.a due to an aging population. On the other hand, strong economic expansion in recent years has contributed to an increase of the employment frequency by 2.6 percentage points from 2005 to 2007, to 70.9 percent.[6]

2.10.1 Promote a life-long approach to work

In order to achieve full employment, all groups in society should feel welcome in the work force. The age structure of the population will change in coming years, resulting in a diminishing proportion of the working population relative to the senior

[4] As drawn up in guideline 17 of the EU Strategy for Growth and Jobs: "Implement employment policies aiming at achieving full employment, improving quality and productivity at work, and strengthening social and territorial cohesion"

[5] Employment frequency is measured by the number of employed persons at the age 15-74 as part of the total population in the same age interval (from LFS)

[6] According to Statistics Norway's Labour Force Survey (LFS)

population, and hence an increasing financial burden on the working population to maintain the level of pensions and other social financial contributions.

A major challenge in the longer run is to counteract the tendency for early exit to retirement. A detailed description of the formulation of Norwegian senior policy is provided in White Paper No. 6 (2006-2007) *On Senior Policy – Seniors as a Resource in the Norwegian Workplace*[7] and White Paper No. 5 (2006-2007) *Accrual and Payment of Retirement Pension under the National Insurance Scheme*[8].

One of the initiatives in meeting this challenge has been to allow persons from the age of 67 to 68 to draw full pension and employment income simultaneously and without a cut in the pension benefit. Previous to this legislation, persons between the age of 67 (the formal age for retirement) and 70 got their pension benefit reduced by 40 percent of earned income (exceeding NOK 133,624).

Another senior policy initiative is a pilot project offering reduced working hours for senior employees. The project will provide information on whether reduced working hours actually lead to postponed retirement, and will be implemented in 2007-2009. Furthermore, a proposal on statutory right to reduced working hours for employees above the age of 62 are was approved by the Parliament in May 2008. This right will apply provided that the reduction in working hours can be implemented without significant inconvenience to the enterprise. The scheme will provide seniors with better options to combine work and pension and can contribute to making more seniors work longer than they otherwise would. It could also ease the transition to retirement for many.

The younger part of the population also demands extra attention given the fact that the rate of unemployment for the age group 16-24 is about three times that of the age group 25-54.[9] In order to enhance employment among young people who are not under education, a Youth Guarantee has been introduced for unemployed between the age of 16 and 19, providing a right to jobs or specially arranged measures. As from last year there is also a follow-up guarantee for young people aged 20-24 who have been unemployed for three months or longer.

2.10.2 Ensure an inclusive labour market for jobseekers and the disadvantaged

Full employment presupposes that the labour market is adjusted to the needs of different categories of jobseekers. Exposed groups such as the occupationally disabled, long-term unemployed, immigrants and unemployed youth must be offered assistance to bring these persons into ordinary jobs as quickly as possible.

The Tripartite Agreement on a More Inclusive Workplace (the "Inclusive Workplace Agreement) contributes to this. In 2006, the three parties (Government and the social partners) renewed the agreement for a new 4-year term (2006-2009). The objectives are to reduce absence due to sickness, scale back the use of disability benefits and make better use of older employees' resources and labour in the workplace. The White Paper No. 9 (2006-2007) *Work, Welfare and Inclusion* outlines measures to strengthen employment and include people who have been or are in the process of being excluded from the labour market. Several new measures to this end were adopted in this year's budget:

- The total level of measures is about 40,000 special work positions. 11,800 of these are earmarked for ordinary employees while 28,200 positions are to assure fast and specially designed assistance for unemployed with occupational disabilities. Jobseekers with psychological issues are among those that are given particular attention. In view of the considerable reduction in the number of unemployed, of all categories, in 2007, an unchanged number of special positions this year implies a strengthening of measures in real terms. A so-called *guarantee* has been introduced to provide labour market measures for recipients of "waiting" benefits who have been unemployed for the last six months or longer and for others who have been permanently unemployed during the last two years or longer.

7 Publication not available in English
8 Publication not available in English
9 LFS-unemployment in 2006 from Statistics Norway, measured in percent of the work force

- This year, several measures related to the Inclusive Workplace Agreement will be initiated. This includes purchasing health services for employees on sick leave, a new scheme for educational leave and educational temporary positions, and more specially designed working positions. Furthermore, the Norwegian Labour Inspection Authority's supervision of the Inclusive Workplace enterprises is strengthened, to make sure they adapt to the Agreement. In total, these measures amount to about NOK 1 billion in 2008. A 10-year research programme on the factors behind sick leave and working life exclusion was established in 2007 with the support from the social partners.[10]
- There are several factors explaining poverty. For instance, there is a clear correlation between poverty and having weak links to working life. In 2007, the Parliament adopted a comprehensive and cross-sectoral Anti-Poverty Action Plan. Targeted labour market measures connected with this Action Plan will continue this year.
- Integration and inclusion are important in getting more people to work. Cooperation between the authorities and the social partners on increased recruitment of people with a third-world background is enhanced in 2008. In addition, an educational offer will be established in the introduction programme. These measures are a follow-up from the Action Plan for Integration and Inclusion, which came in parallel with the Anti-Poverty Action Plan.
- To compensate for the loss of income due to job-loss (when the unemployed qualifies for unemployment benefits), the number of waiting days for benefits is reduced from 4 to 3 days.

A new system for disability benefits is to be in place within the current parliamentary period (2005-2009). One of the objectives is to make more people exploit their working abilities to the fullest.[11] A public review committee has presented a proposal for a new model for computing disability benefits and for acquirement and withdrawal of retirement pension for the disabled.

Underemployment among part-time employees is a challenge. Involuntary part-time includes that of persons who are employed, but who wish to increase their contractual working hours. 42 percent of employed women work part-time, while the corresponding ratio for men is 12 percent. In order to reduce underemployment, part-time employees have been given a statutory preferential right to increased working hours if the employer is contemplating the hiring of additional personnel. The Norwegian Labour and Welfare Organisation, which is responsible for the public recruitment service, shall follow up those who are partially unemployed equally to those who are fully unemployed.

Norwegian working environment legislation provides employees with generous rights in connection to pregnancy, birth and childcare. For one, parents with young children have the right to paid leave when children are ill, etc. The Government wishes to see full kindergarten coverage achieved in 2008. A legal right to kindergarten enrolment will be statuory by 2009. In addition, the tax deductions for expenses of childcare is increased from NOK 5,000 to 15,000 per year in the tax scheme for 2008 (as from the second child).

2.10.3 Harmonise the needs of jobseekers and enterprises

The strong economic growth in recent years has brought along an increasing labour demand. Since the first half of 2005, there has been a significant growth in employment. The number of employed in March 2008 was the highest ever. The labour market is tight, and recruitment problems are now affecting a higher proportion of businesses than during the period 2003-2005. Nevertheless, there are still unused resources to be found in the work force among for instance today's unemployed, underemployed and seniors preferring work to retirement. Through the Norwegian Labour and Welfare Organisation (NAV), the authorities assist employers in filling vacancies with the unexploited work force resources.

The labour supply can be increased in several ways. One is to increase working hours per employee, including a reduction of temporary leaves. Furthermore, retirement from the work force can be reduced and people prevented from being pushed into different welfare benefits, attaining postponed average retirement age. A third option is bringing in people who are outside the work force today. A fourth possibility is increased labour immigration.

[10] The public contribution to this research programme was increased this year by NOK 30 million annually
[11] In order to receive disability benefits today it is required that the income ability is reduced by at least 50 percent

Better employment services
The establishment of new local NAV offices (the NAV reform) is an instrument to get more people employed or in professional activity, and to reduce the number of persons having social security or benefits as their main source of income. Local offices are user-friendlier and provide better co-ordination and more efficient labour and welfare services by offering users one single point of contact. By the end of 2007, 146 NAV offices had been established. In 2008, another 140 local offices as well as regional special units for administration will be set up. A pilot special unit for administration was established in the county of Aust-Agder in the autumn 2007. This pilot will test out the practical distribution of tasks between the NAV offices and special units for administration and will produce important learning before the remaining special units are established.

Labour immigration
Through its policy on labour immigration, the Government is aiming to provide Norwegian economy with sufficient manpower with requested expertice. This should be done in a way that allows all parts involved – employers, workers and society – to benefit from the arrangement.

Labour immigration implies that the Norwegian sysem for working life arrangements faces new challanges. This make it imperative to ensure immigration workers a respectable wage level and working conditions, in order to counteract social dumping and black labour. Measures should also aim to facilitate the social integration of new workers.

This is the prinsipal message of the White Paper no.18 (2007-2008) *Labour Immigration* presented by the Government in April 2008. Its prepositions strengthen Norway as a country in favour of labour immigration.

The labour migration into Norway has tripled from 2004 to 2006; most of this increase (65 percent) is due to immigration from the countries that joined the EU in 2004. There is free access to manpower from the EEA as har as 17 of the EU countries are concerned. Transitional schemes have been implemented regarding ten of the new EU countries.[12] According to these schemes, immigration workers from the countries in question should be offered Norwegian wages and working conditions, as well as, ordinarily, full-time work.[13]

As regards labour immigration from countries outside EEA, imigration is regulated based on perceived needs. In the new White Paper on Labour Immigration, the Government proposes to facilitate the recruitment of foreign qualified workers. Employers wanting to actively recruit workers from outside the EEA is to be given more responsibility. On certain conditions companies should be able to import workers and put them into work before working permits are given. Such an arrangement would include highly qualified specialists, key personnel, skilled workers and employees in international companies.

In order to get labour immigrants swiftly to work, it is necessary to shorten the administrative processing time and improve the service to the users. The administrative processing capacity in the Norwegian Directorate of Immigration and the Norwegian Immigration Appeals Board is thus incremented through increased appropriations both in 2007 and 2008. In its White Paper on Labour Immigration the Government prepares for new measures to increase and improve information, by e.g establishing a new portal to access all information on labour immigration and service imports. Simpler procedures and shorter processing time when recruiting personnel from abroad is also proposed. With required documents available, the processing time of an applicant could be estimated to maximum four weeks.

The Government also wants the current visa arrangements for persons seeking employment to be expanded from three to six months, as it would make it easier for skilled workers from outside the EEA to orient on the Norwegian labour market. The regulations for imigrant workers from this group will aslo be simplified, by classifying them in a few applicant categories. This will make it easier for both employers and workers to find out which applications that they are affected by. Along with good information and swifter processing time, this measure will simplify recruitment from abroad substantially.

Recruitment through apprenticeship programmes
Apprenticeship in an enterprise constitutes the basis for training of vocational qualifications.

[12] Transitional schemes are implemented for citizens from Estonia, Latvia, Lithuania, Poland, Slovenia, Slovakia, the Czech Republic, Hungary, Bulgaria and Romania
[13] There is no work permit requirement for service providers

Today, the supply of such apprenticeships is inadequate. The authorities and the social partners have cooperated in order to increase the number of apprenticeships. Establishing this by law is not an issue for the time being.

In Norway, ships that are included in the net wages scheme for mariners are required to provide training positions (at least 2 positions per ship).[14]

2.10.4 Promote flexibility in combination with labour security and reduced labour market segmentation

The degree of flexibility in the labour market influences the total costs when an economic turn-around or more permanent changes in trade occur. Employees and employers should be able to make changes in the conditions of employment without too many limitations due to the following costs.

Employee-turnover is high in Norway. At the end of the 1990s, about every fourth employee changed job each year. The current provisions of the Working Environment Act are deemed sufficient to cater to the needs of the businesses for temporary recruitment. At the same time, it is emphasised that secure permanent employment results in willingness to restructure and develop competency.

A new act on notification of the closing down of business undertakings (Restructuring Act) was passed by the Parliament in May 2008. The Law introduces i.a an obligation to submit reports when shutdown is planned. The purpose is through interaction between the industry and the authorities, to assess the possibilities for further business, potential new owners, or other restructuing measures. A new provision was also introduced in the Working Enviroment Act obliging business owners, when considering closing down their firm, to enter into discussions with the employees with a view to their taking over the production/firm.

In the state budget for 2008, the maximum period of daily unemployment benefits under lay-off was reduced from 34 to 30 weeks. In addition, the period of receiving rehabilitation benefits was shortened from 6 to 3 months after terminated rehabilitation.

As part of the Action Plan to counteract social dumping (from May 2006), the Norwegian Labour Inspection Authority and the Petroleum Safety Authority Norway have received extra resources – both in 2006 and in 2007. In addition, there are challenges related to finding available information on rights and duties, both for foreign employees and enterprises intending to work in Norway as well as for Norwegian employers wishing to recruit foreign manpower. A strategy will be developed to coordinate and make this information more available to foreign manpower.

In order to promote the dialogue between the social partners and their sister organisations in the new EU member states, a new scheme providing financial support for the social partners is established. The objective is to contribute to the development of professional rights, prevent social dumping and strengthen the labour market.

An academic development project is established to strengthen the discipline of labour legislation. This will contribute to making society secure existing knowledge, increase competence and recruitment to the discipline in the future.

2.10.5 Ensure pro-employment changes in wages and other labour costs

In order to achieve full employment, it is important that the industry costs develop in parallel with the costs of our trading partners. The social partners and the authorities are mutually responsible for the development in wages and other labour costs. The social partners are responsible for carrying out the wage settlements, while the authorities decide the level of public taxes pertaining to employees, such as employers' national insurance contributions and social schemes.

Wage negotiations – the tripartite cooperation and emphasis on dialogue

In Norway, wages are determined by the social partners, through negotiations at various levels, or by the management at each business. The responsibility for ensuring that wage negotiations are completed within responsible limits lies with both employers and employees. However, several income policy committees and commissions have been established where government authorities and the parties discuss the economic situation. The purpose is to reach a joint understanding as far as important aspects of economic policy and the economic foundations for wage settlements are concerned.

[14] Calculated as an annual average

Such income policy cooperation, and the extensive coordination of wage determination, has resulted in the parties also taking into consideration the effects of high wage growth on unemployment and employment. This has contributed to unemployment in Norway typically having been, and remaining, significantly lower than in many other European countries. Norway also mainly has national collective agreements; therefore, regional wage differences are small within most industries.

The goal of retaining competitiveness has formed a key part of the Norwegian wage negotiation model since the 1960s, and has been supported by both government authorities and the social partners.[15] In order to ensure that overall wage growth in the economy is adapted to the needs of the competitive industries, it is a key element of the Norwegian wage negotiation model that the sector exposed to international competition shall conclude its wage negotiations first, and that wage growth within the sectors sheltered from competition shall be adapted thereto. As the wage negotiation system involves both centralised and local negotiations, there is scope for varying local wage growth.

The employment costs

Employment costs are influenced both by the general wage developments and by changes in voluntary or statutory social schemes. The Act of Mandatory Occupational Pension Schemes entered into force in 2006. The act was prepared and proposed upon suggestions from the social partners in connection with the work on the reform of the pensions system, and resulted in an obligation for most businesses to establish occupational pension schemes for their employees. The deadline for setting up an occupational pension scheme that meets the requirements in the act, was set at December 31 2006, with an economic effect from July 1st, 2006.

The establishment of Mandatory Occupational Pension Schemes has increased industry wage costs. In this scheme, the employer is required to pay a contribution of 2 percent of the wage exceeding NOK 66,812 for each employee. If the business prefers to offer a scheme based on defined benefits, the costs of premiums shall correspond to a contribution of 2 percent of the wage exceeding NOK 66,812. The establishment of Mandatory Occupational Pension Schemes has provided 5-600,000 employees with supplementary benefits besides the National Insurance. This mainly affects employees in SMEs in the private sector.

Report Oxford Research (2007) – *Few arrive, many stay*

Between the countries, the competition for the best brains is increasingly getting harder. Norway is in a situation of high demand of highly qualified employees. The Norwegian labour market does not sufficiently cover this demand, which obliges businesses in Norway to search for people in the global labour market.

The report *Få kommer, mange blir* ("Few arrive, many stay") points to explanations of how Norway can maintain its position in the global labour market, and become attractive in the competition for foreign labour with good qualifications seeking employment (Global Professionals). Oxford Research carried out the analysis for The Norwegian Ministry of Labour and Inclusion, The Norwegian Ministry of Trade and Industry and The Confederation of Norwegian Enterprise. The study is based on document analysis and benchmarking by using data from registers and focus group interviews.

The report shows that Norway is an attractive country for people with high skills (so-called "Global Professionals"), compared to other European countries. However, despite being attractive, we seem to attract such labour mostly on a random basis. Once arrived in Norway, the survey shows that the "Global Professionals" are likely to stay. Furthermore, the analysis shows that several positive features of the country and jobs in Norway are not well known abroad.

The main challenge is, according to the report, to attract these persons to Norway. To achieve this, the report recommends measures such as increased inclusion, more openness, easier access to information in English, international schools, better availability to Norwegian classes, more efficient and swift administrative routines concerning work and residence permits and better information on cultural activities.

[15] For more information on the Norwegian wage negotiation model, see NOU 1999:14 Preparation of the wage settlement 1999, chap 2 *The foundations for the Norwegian wage negotiation model*

Nordic model for the labour market?

The Nordic labour market stands out from the rest of Europe in certain areas. Even though one can find variations between the Nordic countries, they appear to have some common features in the labour market:

- The social partners have a substantial influence on labour regulations, primarily through extensive possibilities for regulation through collective agreements
- There is a high degree of organisation in labour unions and employers' associations
- There is a relatively small wage dispersion and large degree of coordinated and centralized wage determination
- Norway, Sweden and Denmark have comprehensive and active labour market measures
- Norway and Sweden have a relatively high degree of employment protection
- A very high score distinguishes Norway and Denmark on the OECD ratings of how employees perceive their employment security – measured as the security of maintaining one's place in the working life

The idea of "flexicurity" has been discussed to a large extent in today's labour policy. It reflects how the labour market is organised in order to take both flexibility and security into consideration both for the employer and the employee.

In particular, the Danish way of organising the labour market has been marked as "flexicurity". It has been given particular attention in the debate in the EU. In Denmark, the threshold for individual dismissal is relatively low, and the Danish labour market is also distinguished by high job rotation. In comparison, the Norwegian employment protection is stronger for the individual employee. However, there are openings in the collective schemes for workforce reductions and changes, which also make the Norwegian labour market flexible. Actual job rotation in Norway is at about the same level as in Denmark. The role of an active labour market policy is strong both in Denmark and in Norway.

The other Nordic countries also have characteristics and common features similar to flexicurity. They can be described as a combination of a flexible labour market based on employers and employees participating in the framing of the policy, generous schemes for income protection for those who cannot participate in the labour market, and an active policy to increase competence for the unemployed and get them back into work.

2.11 Education and competence

Competence and manpower are society's most important resources. The use of human resources is essential to growth and employment and thus to future welfare.

2.11.1 Measures for promoting and improving investment in human resources

The foundation for competence is laid in the kindergartens. Kindergartens of high standards contribute to lifelong learning and active participation in a democratic society. A legal right to kindergarten enrolment will be statuory by 2009 (see also section 2.10.2).

The availability of basic education and higher education is satisfactory in Norway. Everyone has the right to 13 years of education.[16] Almost half of all students pass on to higher education, and among these, almost all study at public education institutions where there are no tuition fees.

Norway has challenges concerning student dropout during upper secondary education. In the Government's White Paper no. 16 (2006-2007) … *and no one was left. Early efforts for lifelong learning* [17], the possibilities and initiatives to confront these challenges are depicted. The reform known as "the Knowledge Promotion" was implemented in fall 2006. The reform focuses on developing the quality of basic education. From this school year on (2007-2008), the total number of hours from 1st to 4th grade will be expanded by 5 hours weekly. For 2008, the Government has granted NOK 276 million to this initiative. Additionally, the experiments with expanded school day and school meals will continue.

[16] Upper secondary education for adults is for persons born before 1978
[17] Publication not available in English

From autumn 2008, Norwegian schools will also provide free educational equipment for all pupils in higher secondary education (third year included). For advisory services in upper secondary education and partnership agreements for career advisory services with the regional authorities, the funding has been increased as well. In 2008, NOK 1 billion will be spent on quality-increasing measures in basic education.

The structure of studies was changed as part of the quality reform in order to increase the overall flow to higher education. To improve the financial framework for students in higher education, the grants for student housing have increased by NOK 40 million in 2008. The result is that about 670 new student houses will be built. Furthermore, all the rates in the education support arrangements through the Norwegian State Educational Loan Fund will be price-adjusted by 2.5 percent (expected increase in the consumer price index) from the education year 2008-2009. The basic support per student in higher education is increased to NOK 85,000 for the same educational year. Furthermore, in 2008 NOK 69.1 million will be spent on upgrading the ICT systems of the Norwegian State Educational Loan Fund.[18]

Lifelong learning is a priority in the competence policy. Norway is for the time being in a situation where there is a lack of manpower in several sectors. At the same time, whole groups are excluded from the labour market due to lack of competence. It is therefore important to facilitate the enhancement of competence for adults. The programme for basic competence in the labour market is crucial in this regard.[19] Furthermore, legislative work has been initiated in order to establish by law the right to upper secondary education for anyone above the age of 25.[20] The proposal was approved by the Parliament in May 2008, and will come into force August 1st 2008.

Another important measure is the increased funds for the EU program for lifelong learning, which is approximately NOK 187 million. Moreover, a national forum for research on education will be established. Such a forum can become a central cooperation arena for the research community, the administration and the political leadership.

2.11.2 Introducing education and training systems for new competence needs

Knowledge on which forms of competence that will be important in our future society and labour market is crucial in order to develop adequate education and training systems. It is important that everyone acquires basic knowledge. In addition, learning strategies, social competence and motivation have been identified as important aspects of competence. Through the reform "the Knowledge Promotion," so-called competence platforms have been developed as a basis for new curricula and structures.

Innovation ability is important for future wealth creation. It is therefore crucial to facilitate entrepreneurship in education. In 2004, a strategy for entrepreneurship in education was launched, including measures for the whole education system. This Strategy will be evaluated in 2008 (see also chapter 2.2.2).

Furthermore, it is necessary to certify and evaluate competence. In this regard, a system for certification and evaluation of competence in science and mathematics in upper secondary education has been established. This is known as the Bologna-process. The Bologna-process was initiated in 1999 with the purpose of developing one European area for higher education within 2010. In this regard, a European framework for qualification certification is being developed. One of the measures is the introduction of a new structure with bachelor and master degrees, as well as a new system for credits based on the ECTS model. The Quality Reform is the Norwegian follow-up of this process.

[18] The upgrading of the ICT systems will continue until 2011
[19] The grants are increased up to NOK 37 million for 2008 and it is considered to make this augmentation permanent
[20] As of today, only persons born before 1978 have this right

Textbox: The PISA Survey[21]

OECD's Programme for International Student Assessment (PISA) is an international analysis of the education systems of several countries. PISA seeks to measure how well 15-year-old pupils – who are about to finish compulsory education – are equipped to meet the challenges of the "knowledge society". The evaluation is done by measuring the skills of the pupils in reading, mathematics and natural science. A main objective of the survey is to measure a student's ability to utilize knowledge and skills in concrete situations, rather than to what extent they master and are able to reproduce a given syllabus. In addition, the survey contributes to increased knowledge about which factors that advance good learning and to what extent the school's resources and the pupil's background affect student performance.

PISA surveys are conducted on a triennial basis. So far, we have the results from 2000, 2003 and 2006. The analysis for 2006 was published in December 2007. Each survey places emphasis on one particular theme. The main focus of the 2006-survey was science literacy. Questions related to natural science constitute 2/3 of the scholastic part of the survey. The PISA-survey is broadly based and 57 countries, including 30 OECD members, participated in the 2006-survey. About 400,000 pupils took part.

The results are normalized such that the OECD average for the 2003-survey amounts to 500 points. Norway achieved 487 points in natural science, which is the lowest score in the Nordic region. The OECD average in natural science in 2006 was 500 points. Finland came on top with an average of 563 points. Sweden came out just above the OECD average with 503 points, while Denmark and Iceland achieved 496 and 491 points, respectively.

For reading skills, Norway achieved 484 points, which is lower than other OECD countries though the OECD average is down from 500 to 492 points since 2003. The reading understanding of the Norwegian students is also lower than in 2000 and 2003. The Finnish students are performing well in this field too, achieving 547 points. Sweden performs better than the OECD average with its 507 points, while Iceland's score is similar to Norway's. Denmark is performing according to the OECD average.

The results in mathematics share many of the features of natural science and reading understanding. For the first time in PISA, Norway performs below the OECD average. Norway achieves 490 points while the OECD average in 2006 is 498 points. Finland comes out on top in the Nordic region and OECD with 548 points. Denmark, Sweden and Iceland are above the OECD average, obtaining 513, 506 and 502 points respectively.

The Norwegian results are a matter of concern. If we compare the surveys in 2000, 2003 and 2006, we observe a descending trend in the performance in all three subjects in this period. Comparing the results over this period is difficult, however, because different scholastic subjects are measured each time. Also, the survey does not take into account the curriculum or syllabus of the participating countries. Furthermore, many important skills are not a part of the survey. Hence, the PISA survey does not provide the whole picture of the quality of Norwegian education.

[21] www.pisa.no and http://www.oecd.org/pages/0,2966,en_32252351_32235731_1_1_1_1_1,00.html

3. The Structural Indicators

The EU has defined a set of indicators in order to measure the progress of the Strategy for Growth and Jobs. The structural indicators cover general economics, employment, R&D, work related to economic reforms, environment and social solidarity. In this chapter, we will compare Norway to the EU countries and comment on the characteristics for each indicator. The other EFTA countries are also included, provided that Eurostat has reported data from these countries. USA and Japan are included in some graphs and tables to give an even broader international standard of comparison.

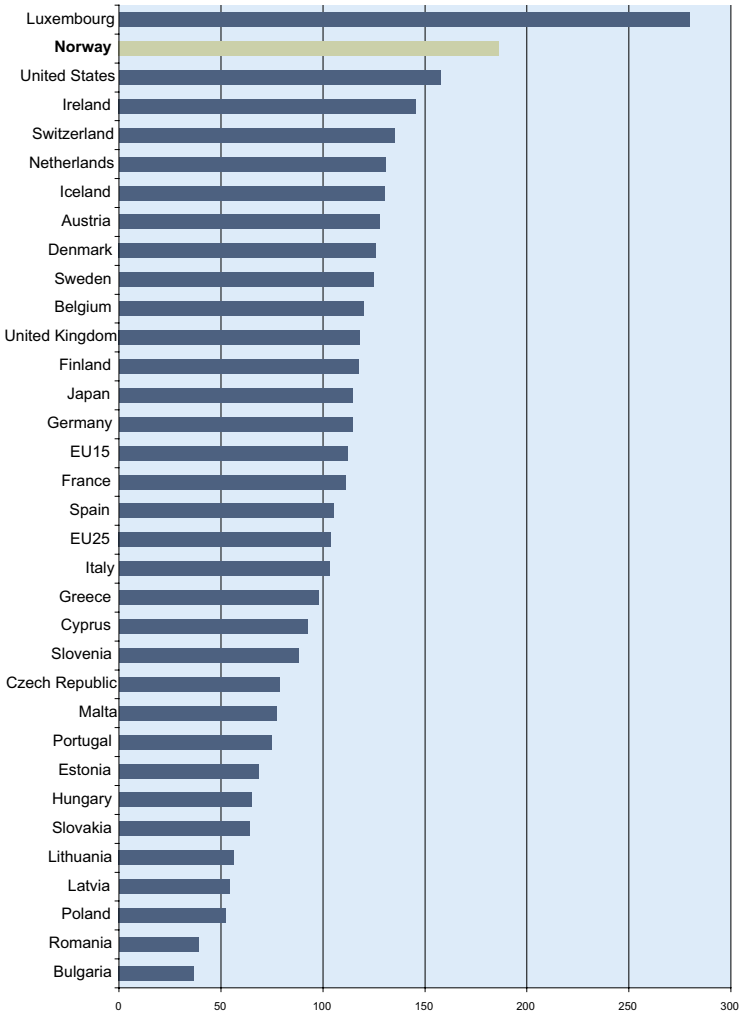
3.1 GDP per capita (graph 1)

Gross Domestic Product (GDP) is a measure of the overall value of goods and services produced in public and private sectors. GDP per capita is relatively high in Norway (about 86 percent higher than the average for the EU countries). Only Luxemburg had a higher level in 2006. All the Nordic countries have a GDP per capita above the EU27 average.

Graph 1 shows GDP per capita in Purchasing Power Standards. The series is indexed with GDP per capita in EU27=100, using fixed prices from 2006. In 2006, Norway had a GDP per capita of 186.3 as measured by this index. This is clearly higher than the 2005 level of 180.1. The reason for this is that the Norwegian economy has had a higher growth rate than the rest of Europe for the last years, probably due to improved terms of trade, high prices on raw material and generally improved conditions for the export industries.

GDP is the most appropriate indicator of national growth. However, GDP does not include the value of production that is not measured in market prices or quantified in other ways. This means that unpaid work, like domestic work and undeclared work, is not included. As far as paid work not traded on a market is concerned, like e.g. public administration, the value of output is measured by the cost of production. If the willingness to pay for public services is higher than the cost of production, the level of GDP could be underestimated. And the other way around, if the willingness to pay is less, the level of GDP could be overestimated.

1. GPD per capita in Purchasing Power Standards (EU27=100), 2006



GDP is measured in national currency. There may then be a problem associated with inter-country comparisons. Adjusting with Purchasing Power Standards implies that one calculates the exchange rate by looking at the relative difference between the prices of comparable baskets of goods in the two countries, measured in local currency. In other words, this method takes into account international differences in price levels, so that a country's production better reflects the domestic *actual* purchasing power. Norway has a relatively high price level compared to the EU average. Therefore Norwegian GDP in Purchasing Power Standards will be closer to the EU average compared to GDP levels measured by exchange rate conversion without any purchasing power adjustment.

GDP per capita is a static indicator that gives a snap-shot at a specific point in time, whereas growth in GDP gives us information about the development over time. For Norway, part of the high level of GDP can be explained by the petroleum activity. Petroleum revenues represent a movement of wealth from oil and natural gas reserves to financial investments and should therefore not be considered as regular income. This means that the Norwegian level of GDP increases by more than the normal rate of return from labour and capital, and this affects all indicators related to the GDP. A large share of the revenue from petroleum activities is invested in financial assets abroad. The return on such assets may add to Norwegian Gross National Income in the future.

An alternative measure of overall wealth creation is provided by the GDP of Mainland Norway, as obtained by subtracting the value of production on the Norwegian continental shelf and the value of international shipping from regular GDP. The main reason for studying the GDP of Mainland Norway is that it provides a measure of Norwegian wealth creation that is not directly dependent on changes in the oil price. In 2006, Mainland Norway GDP accounted for 72.8 percent of total Norwegian GDP. Still, GDP per capita for Mainland Norway was 21 percent higher than the level for EU15.

3.2 Labour productivity (graph 2)

Productivity is defined as production value per worker or per working hour and provides an indication of how much one receives in return for the labour inputs. In general, it is complicated to interpret measures of productivity. However, there is consensus that growth in the productivity level represents a positive development in a country's economy.

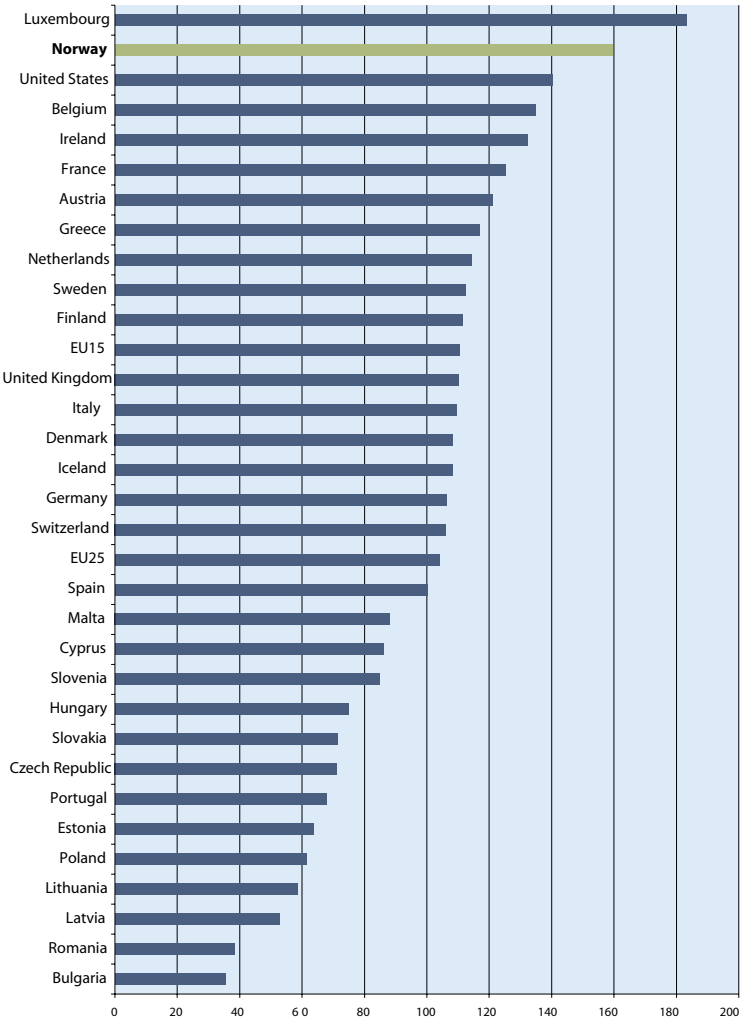
Labour productivity is one of the most important measures of productivity. The indicator is defined as GDP per person employed, in Purchasing Power Standards (EU27=100)[1]. Graph 2 shows that in Norway in 2006, the labour productivity was 158.6, in other words, almost 59 percent above the EU27 average.

As mentioned in chapter 3.1, Norway's high level of GDP per capita is partly explained by the revenues from the petroleum sector. The petroleum activity has a high return on each unit of labour input. Subtracting offshore activities and focusing on GDP for Mainland Norway only, we find that in 2006 Norway had a labour productivity about 20 percent higher than the EU27 average, and 9 percent higher than the EU15 average.[2]

Norway and the other Nordic countries are characterised by high levels of employment compared to the EU average. Therefore, Norway has a lower production level (GDP) per person employed than per capita, relatively to the EU27 average. In the Nordic countries, a relatively large share of the employed workers are in the public sector, where real productivity is difficult to measure. This could imply that the margin of error for the productivity estimations is bigger for the Nordic countries than for the EU countries, with relatively smaller public sectors.

A high level of GDP per person employed implies that one achieves a high return on each unit of labour input, which must be characterised as a

2. GPD per person employed in Purchasing Power Standards (EU27=100), 2006



1 Workforce in employment includes employees and self-employed persons

2 It has been taken into consideration that Mainland Norway GDP is 72.8 percent of overall GDP, and that 3.4 percent of the labour force works in the petroleum sector or in international shipping, and therefore must be excluded from a calculation of GDP per person employed in Mainland Norway. All figures are from 2006 (SSB)

positive thing. However, understanding why a country has a high level of labour productivity is essential. One may, for example, increase labour productivity by adding capital input per person employed. The productivity could also increase when increasing the price on the product, independently of the efficiency of production. In the longer run, it is more important to establish an appropriate ratio between labour and capital, than to achieve a particularly high productivity in terms of labour inputs alone.

3.3 Expenditure on R&D (graph 3)

The indicator measures gross domestic expenditure on research and development, as a percentage of GDP.

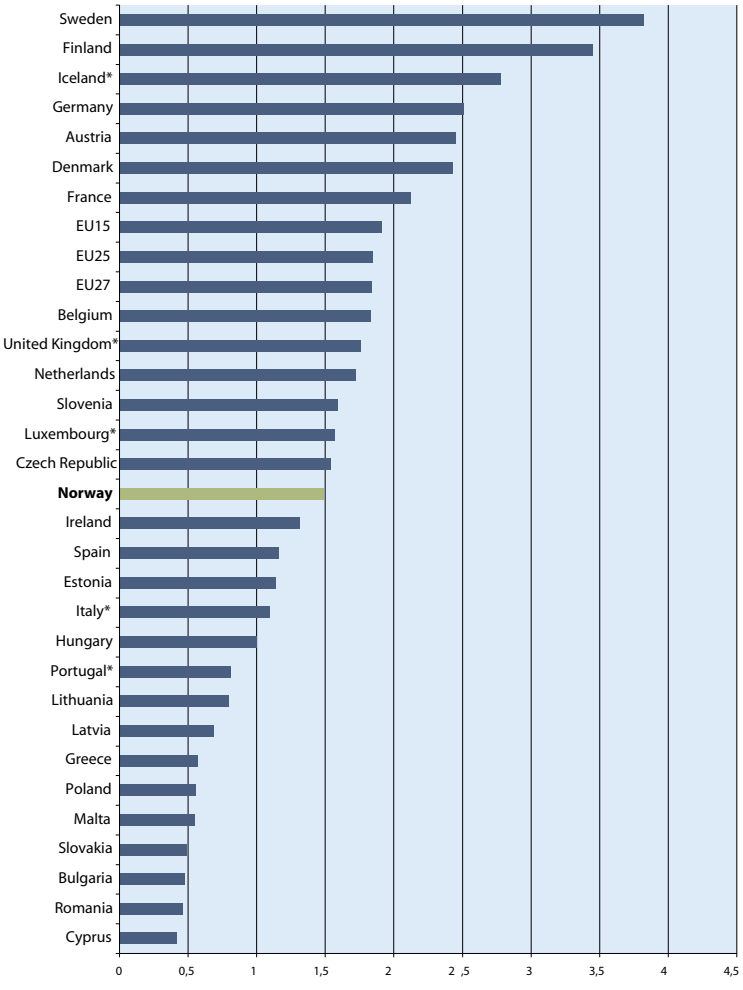
This is one of the indicators for which the EU has chosen to define a specific objective. The objective is for rescearch and developement (R&D) expenditure to equal 3 percent of GDP by 2010. Norway has the same goal. In 2006, Norway registered R&D expenditure of about 1.5 percent of GDP (graph 3). This is somewhat below the EU27 average of 1.84 percent. As illustrated in the graph, there is a relatively wide disparity between the various countries. Generally speaking, countries with a lower GDP per capita appear to have lower R&D expenditure. Sweden is the EU country with the highest R&D input as a percentage of GDP, with R&D expenditure representing 3.82 percent of GDP in 2006. For the other Nordic countries, Finland had an R&D share of 3.45 percent, while Island and Denmark had 2.75 percent and 2.43 percent, respectively.

R&D expenditure is often separated into public and private R&D input. A Norwegian feature is a relatively low level of R&D expenditure on the part of the business sector, compared to various EU countries. This has to do with our industrial structure being characterised by relatively few R&D intensive industries. Norway has a particularly high share of industries based on natural resources, like petroleum, aluminium and aquaculture. Although these industries are using a lot of sophisticated technology, their research inputs relative to production value are less than would be common within, for example, ICT. In Norway, high and medium technology industries account for a relatively low share of GDP, and there has not been a significant development towards establishing more such industries over the last decade.

R&D is important for wealth creation to the extent that it generates new knowledge and technology, which again results in profitable innovation. In other words, there is no automatic and uniform casual link between research activities and increased wealth creation; even though we could assume that research normally contributes to wealth creation and welfare. The extent to which increased research will result in expanded wealth creation depends on what type of research is carried out, the quality of such research, the ability to communicate the findings from such research, and consequently, not only on the amount of R&D expenditure. The indicator shows how much resources are allocated to R&D, but not the return on such inputs.

Nor is it obvious that a general increase in R&D expenditure will match our current comparative advantages. A general increase in R&D expenditure may result in the industrial structure changing from less to more R&D intensive industries over time. If Norway's comparative advantages are not within R&D intensive industries, despite increased R&D activities, one cannot know for certain that higher R&D expenditures will result in increased wealth creation. However, the comparative advantages of a country may change over time, and increased R&D expenditure may contribute to such change.

3. Gross domestic expenditure on R&D as a percentage of GPD, 2006



BOX: The R&D objective

When deliberating the White Paper on Research, "Commitment to Research"[3], in 2005, the Parliament endorsed the objective that investments in R&D in Norway should equal 3 percent of GDP by 2010. The Government's Soria Moria declaration supports this objective.

The total R&D expenditure has not developed in line with this objective. The research intensity, measured as the share of R&D expenditures of GDP, reached its highest level of 1.7 percent in 2003, and was then reduced to 1.5 percent in 2006. This reflects strong growth in Norwegian GDP (in current prices) during this period and that R&D investments did not follow this development.

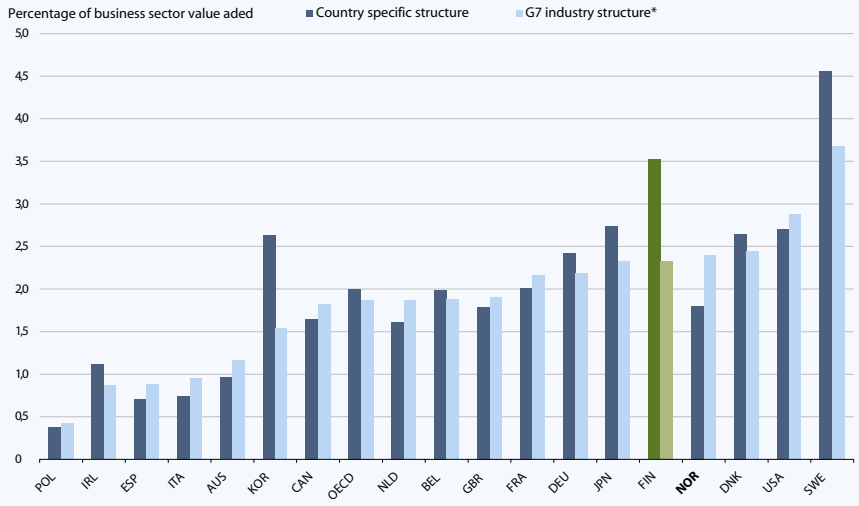
In recent years, Norwegian research intensity has been somewhat below the OECD total. In 2005, R&D investments in the 30 OECD member states were about 2.25 percent of the total GDP for the countries. However, there were large variations between the OECD countries. Only Sweden, Finland and Japan had research intensity above 3 percent of GDP. Among the 30 OECD member countries, Norway ranked as 18th regarding total research intensity. When public sector funding was measured separately, we ranked as 13th.[4]

Norway is not the only country having experienced a decline in research intensity after the turn of the century. In spite of the R&D target, the EU countries also registered a decline and stabilization in R&D investments over the period. In the OECD area, the real growth in R&D investments fell from 4.6 percent annually over the period 1950-2000 to 2.2 percent over the period 2001-2005. The US saw its research intensity peak in 2000, at 2.74 percent of GDP. A gap between Denmark, Finland and Sweden compared to Norway appeared in the 1980s and has increased ever since.

The White Paper on Research points out that our performance is good as far as individual industries are concerned, although these industries are traditionally characterized by low research intensity. The OECD-report *Economic Policy Reforms: Going for Growth* (2006) illustrates that with an industrial structure identical in the whole OECD, the actual national research intensity in the individual industries would have placed Norwegian business sector among the highest ranked OECD countries as to the level of R&D intensity. Norway is also among the countries where such adjustment makes the biggest difference (see graph below). The report emphasizes that Norwegian business have high research activity within industries that in international terms are large, but small in Norway. In the business sectors that are large in Norway, research intensity is low on the other hand.

Norway uses a high number of researcher man-years. Norwegian enterprises are among the ten most man-years intensive of the OECD countries when it comes to research.[5] The number of persons involved in research efforts can be an important determinant of the ability of the economy to disseminate and absorb new knowledge. We score even higher when researchers outside the business sector are included, but somewhat lower when other R&D personnel are added.

Graph: R&D intensity in the industry adjusted for variations in the industrial structure. Average 1999-2002



* All countries are assumed to have the same industry structure. Calculated on the basis of R&D intesity per industry with the weights of each industry corresponding to their share of total business-sector value added on average across G7 countries.

Source: Economic Policy Reforms: Going for Growth (OECD 2006)

3 White Paper No. 20 (2004-2005) to the Parliament
4 2005 is the most recent year with international publication of statistics from OECD
5 OECD Science, Technology and Industry Scoreboard 2007

Several Norwegian enterprises have a considerable individual research effort. In 2006, Statoil, Norsk Hydro, Telenor and Orkla were all among the world's 1,000 largest R&D enterprises in absolute terms. Statoil was even among the world's 400 largest R&D enterprises. Also Kongsberg Gruppen, DnBNOR and Tandberg are highly ranked and were among the 1 000 largest outside the EU. In addition, the Norwegian enterprises increased their research effort more than the EU enterprises from 2005 to 2006.

Cooperation efforts are rather widespread. Norwegian innovative enterprises are on the average when reporting on cooperation activities with other enterprises, for both smaller and bigger enterprises. The frequency of cooperation is almost as in Germany and Austria, but lower than the other Nordic countries. However, for innovating firms' collaboration with public research organisations, Norway shows good results. We rank 6th in the OECD for firms collaborating in innovation with higher education institutions and 2nd when it comes to collaborating with other government institutions, such as research institutes.

3.4 Educational attainment (graph 4)

Having a well-educated labour force tends to increase labour productivity, and one therefore assumes that it is a source for growth and wealth creation. The indicator for educational attainment from Eurostat is defined as the percentage of young people, i.e. those aged 20-24 years, having completed at least upper secondary education.

However, the indicator can be sensitive to how the various countries measure the number of young people with upper secondary education. In some countries, among them Norway, this indicator reports the number of students who have *started* upper secondary education. Other countries, among them Iceland, report the number of students having *completed* upper secondary education. The statistics therefore is of limited comparability. There is an ongoing international project to agree on a more unitary standard for measurement of levels of education.

4. Percentage of the population aged 20-24 years having completed at least upper secondary education, 2006.

Graph 4 shows that, in 2006, 93.3 percent of the Norwegian population aged 20-24 years had started upper secondary education. New data from Statistics Norway reveal that only 70 percent of them completed this education.

The Norwegian level reported by Eurostat in 2006 is high in a Nordic perspective. In 2006, Sweden registered 86.5 percent of its population between 20-24 with upper secondary education, Finland 84.7 percent and Denmark 77.4 percent.

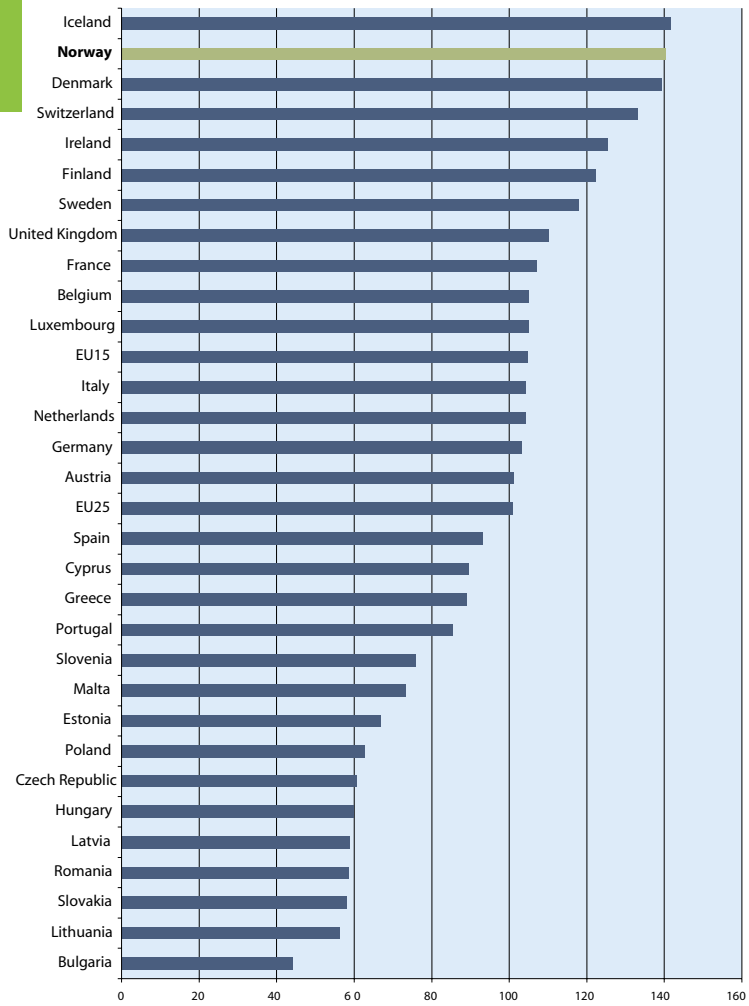
As different countries define upper secondary education differently, this indicator should be considered in view of other available statistics. The indicator does not say anything about the quality of the education, nor what kind of knowledge this group actually possesses (see box on PISA).

3.5 Comparative price levels (graph 5)

The indicator measures the relative prices of comparable baskets of goods in various countries, calculated in the same currency. The purpose of this indicator is to compare what one has to pay for a basket of comparable and representative goods and services in different countries. The basket will include both imported goods and domestically produced goods.

The comparative price level has been indexed to the EU average (EU27=100). In 2006, Norway registered

5. Comparative price levels of final constumption by private households, including indirect taxes (EU 27=100), 2006



an index value of 139.8 as shown in graph 5. This was the highest price level in Europe after Iceland.

For goods traded in an international market, we do not expect to find large inter-country price differences. Price differences for traded goods may reflect a lack of competition at the importer or retail level. However, for goods that are not traded on the international market, one would expect to find a correlation between the wage level and the price level. The wage level in a country is determined by, among other things, its labour productivity. High productivity in industries exposed to international competition will contribute to a high national wage level. Consequently, rich countries often have a high wage level, and this results in the prices of products that are not traded internationally, such as many services, being higher. The price levels in the countries presenting data for this indicator also illustrate this fact. There is a clear positive correlation between price levels and GDP per capita/person employed.

One would expect increased integration in Europe to result in an ever-increasing number of goods being traded between countries. These factors would tend to promote the convergence of price levels. During recent years, one has also seen a reduction in the price level differential between the EU countries. However, the interpretation of such convergence is not unequivocal. When poor countries grow faster than the rich, one would expect price levels to converge. Both relative growth and increased integration are strong driving forces behind this equalization.

Like Norway, the other Nordic countries are characterised by a high price level relative to the EU average. Although the price level in Norway may reflect high wages and productivity, the price level could also indicate that the level of productivity in the service sector has potential for improvement. It may also be a signal of inadequate competition within industries sheltered from international competition.

The European Commission has been rather critical on what it perceived to be insufficient actions to increase competition when considering the reform programmes submitted by Sweden and Finland in 2005-2007.[6]

3.6 Business investment (graph 6)

This indicator measures gross fixed capital formation by the private sector as a percentage of GDP. As shown in graph 6, such investments accounted for 16 percent of GDP in Norway in 2006. This is lower than the EU27 average, but in line with the levels in the Netherlands, Germany and the UK. Sweden and Finland also have lower levels of investment relative to GDP than the EU average.

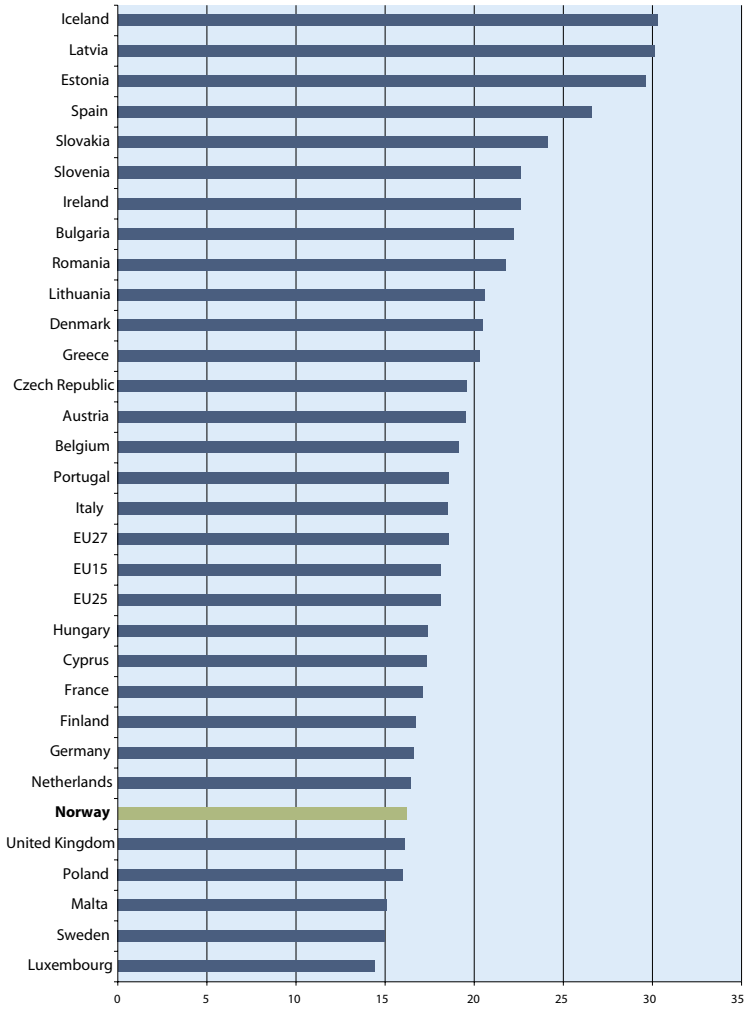
An insufficient amount of capital per worker could lower the productivity in a country's economy. Investments in real capital could give a high marginal return in countries with low GDP per person employed. Countries with a large share of investments often also have strong growth.

When focusing on countries with productivity levels above the EU27 average, there is little or no correlation – it appears that the rate of investment does not depend significantly on how productive the country is.[7] As far as rich countries are concerned, a high investment rate may indicate that the country in question attaches particular weight to attracting

6 Denmark was also criticised, but in an evaluation in 2007, the Commission applauded Denmark's new actions for increased competition

7 The correlation between GDP per person employed and the investment level is –0,475 when looking at all the EU27 countries plus Norway However, there is lower degree of correlation if we only look at countries with GDP per person employed than the EU27 average. The calculation has been performed with 2006 graphs. Calculations from earlier years show the same pattern

6. Gross fixed capital formation by the private sector, as a percentage of GPD, 2006



capital-intensive industries. Countries with abundant natural resources, like Norway, may experience considerable fluctuations in their rates of investment. When petroleum installations are under construction, investments will be high, and in subsequent periods, investments will be low and GDP high because of the yield from such installations.

3.7 Greenhouse gas emissions (graph 7)

This indicator shows developments in the emission of greenhouse gases between 1990 and 2005 for each country, measured as CO_2-equivalents (1990=100). The indicator encompasses the six greenhouse gases included under the Kyoto Protocol.[8] The emissions should be compared to the obligations these countries have taken on from ratifying the Kyoto Protocol. Norway is obliged not to exceed a 1 percent increase, while the EU15 are obliged to reduce their emission by 8 percent from the 1990 level, over the period 2008-2012. The EU has allocated the emission reduction requirements between these 15 member states according to their individual position.

As illustrated in graph 7, Norway exceeded its obligations by 8 percentage points, while the EU15 exceeded theirs by 6 percentage points. The Norwegian emissions increased more rapidly than those of the EU during the 1990s, but were relatively stable between 1999 and 2005.

Each country enjoys considerable freedom in choosing for itself how to allocate the costs of reducing greenhouse gas emissions, through their choice of climate policy measures. A country can choose to let the state absorb the entire discrepancy by purchasing quotas in the international quota markets or by making use of the Clean Development Mechanism (CDM) and Joint Implementation (JI), while another country may impose strict emission regulations, low quota allocations or high CO_2 taxes on the business sector.

Use of the international flexibility mechanisms CDM and JI and the European emission trading system (EU-ETS) may result in a more efficient resource allocation, as it will result in emissions being reduced first in those locations where it is the least costly. The indicator only registers the emissions of each country, and not whether a country meets its obligations by purchasing quotas or by investing in projects abroad.

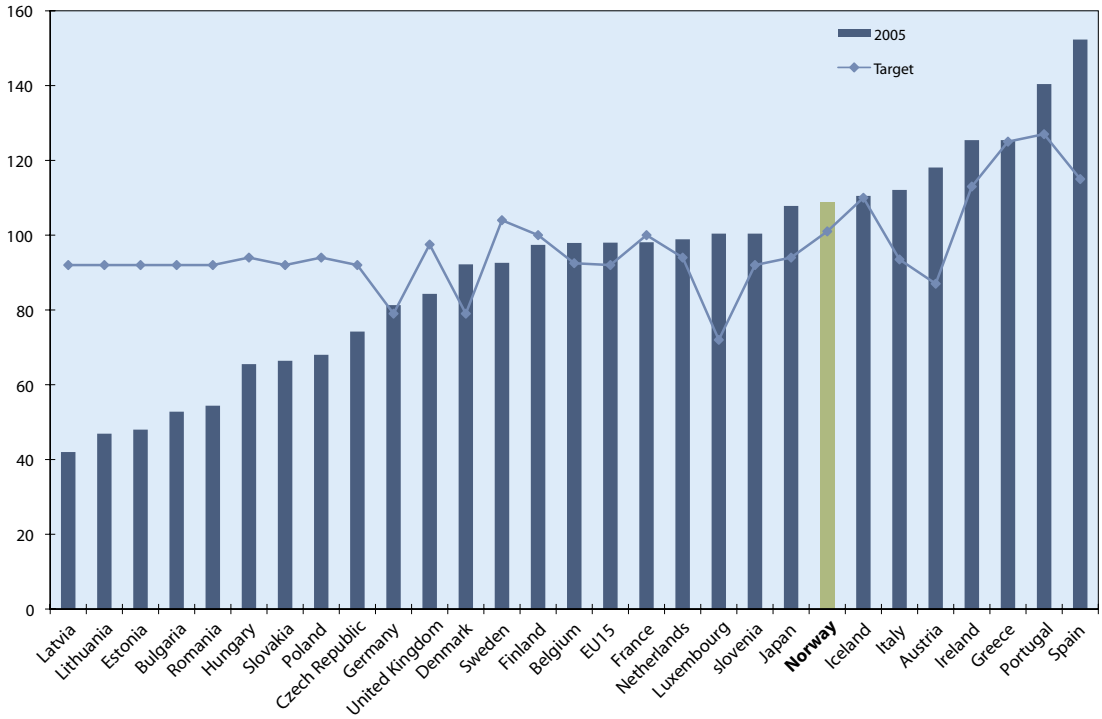
3.8 Energy intensity (graph 8)

This indicator shows the energy intensity of the economy and encompasses use of coal, electricity, oil, natural gas and renewable sources of energy. It is an aggregated indicator, which is calculated from the gross domestic consumption of energy, measured as kilograms of oil equivalents, relative to GDP.

In 2005, Norway registered a level of 211.55, having one of the lowest energy intensities among European countries (see graph 8). The energy intensity of a country may be related to many different factors, for example, its industrial structure, its geography or energy efficiency of its manufacturing industry. An aggregate indicator like energy consumption divided by GDP does not provide much information as to whether the production of certain goods is efficient or not. If the indicator were to be calculated in terms of individual goods, one would be better placed to assess whether the energy efficiency in the production of such good was superior or inferior to that of other countries. However, reduced energy intensity over time may in principle reflect enhanced production efficiency and reduced production costs, although it will also reflect structural changes in the economy.

8 These six gases are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O) and three types of fluoride gases (HFK, PFK and SF_3).

7. Greenhouse gas emissions in 2005 (1990=100) and emission targets in the Kyoto Protocol



The differences in energy intensity internally within the EU are large, between the new member states in the east and the other countries making up for EU15. Several of the new member states, and in particular countries that were under communist rule until 15 years ago, have a very high consumption of oil equivalents relative to GDP, compared to the EU15 average. This may indicate that there is a large potential for improving the energy efficiency in the new member states.

For Norway, as an energy exporter, it is not obvious how reduced energy intensity on the part of the EU will influence Norwegian wealth creation, and Norwegian export revenue in particular. However, it cannot be unequivocally concluded that reduced energy intensity will result in reduced demand for Norwegian energy exports. Natural gas and oil are relatively clean and efficient sources of energy compared to, e.g. coal. A change from coal to natural gas may result in more efficient energy use, lower environmental emissions, and increased demand for Norwegian energy exports.

3.9 Transport (graph 9)

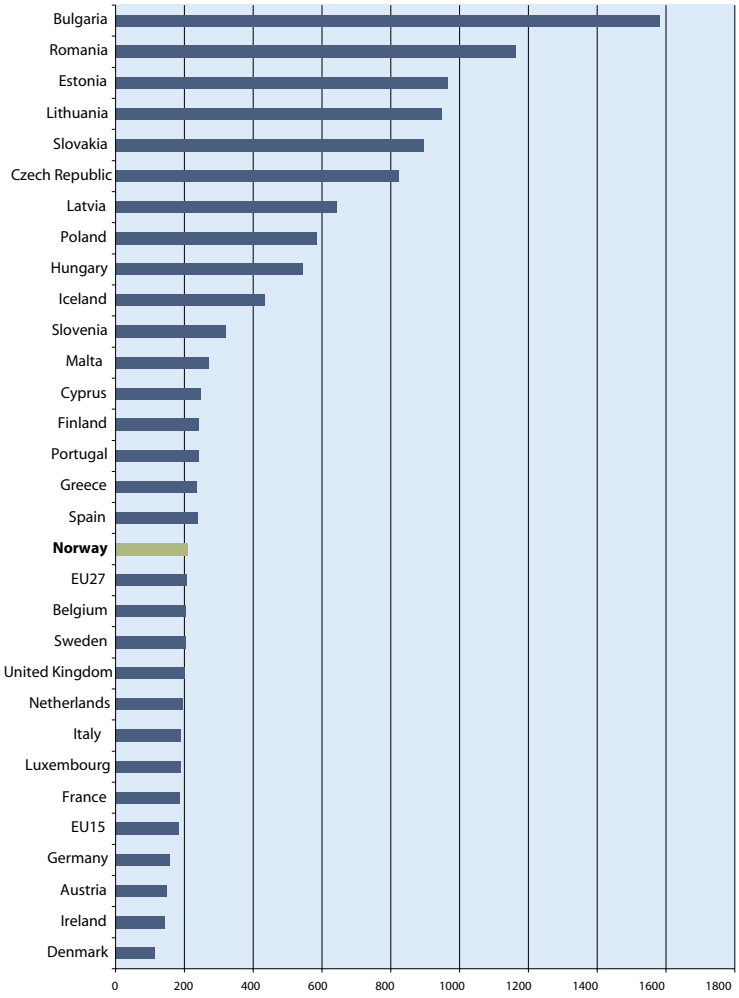
This indicator provides us with information on the development in costs directly associated with transport. It is defined as an index of domestic freight transport volume (tonne-km) relative to GDP (1995=100). The indicator is less suitable for assessing whether wealth creation has become more or less environmentally friendly, since no distinction is made in terms of means of transport and the environmental characteristics thereof. Both development in geographical variables, such as housing and employment patterns, in the composition of production and consumption (weight-value), and GDP developments will influence the indicator.

Norway has registered levels above the EU average in freight transport volume. This is probably due to geographically disperse housing and large distances. In 2006, Norway had a level of 133.2 (as shown in graph 9). This means that we have seen an increase in the freight transport volume of about 33 percent since 1995. This is due to the fact that a large part of the increase in Norwegian GDP can be explained by an increase in production of transport intensive goods: Oil and natural gas. The average among the EU countries is about 7 percent above the 1995-level, although with a certain disparity between the countries. During recent years, both Denmark and Finland have experienced a sharp decline in domestic transport efforts relative to GDP.

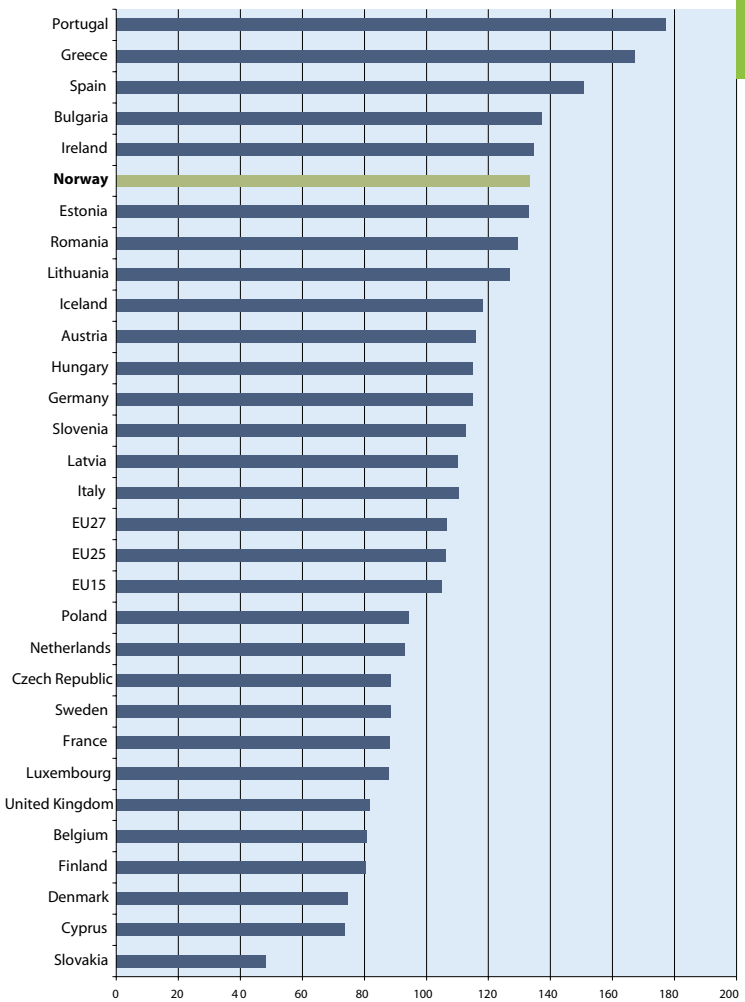
3.10 Employment rate (graph 10a and 10b)

Labour is considered as society's most important resource and the most important input in production of goods and services. The employment rate provides information on the extent to which a country has managed to include the population in the labour market. Eurostat defines the indicator as the number of employed persons aged 15-64 years as a share of the total population in the same age group.

8. Energy intensity of the economy, calculated as gross inland consumption of energy, measured in kilograms of oil equivalents divided by GDP. 2005



9. Volume of domestic freight transport measured in tonne-km relative to GDP (in constant euro) (1995=100), 2006



The EU has quantified several targets for the employment rate. For the population as a whole, it is set to be at least 70 percent by 2008, whereas the employment rate for women should attain at least 60 percent. Graph 10a shows that Norway had a total employment rate of 75.4 percent in 2006. This is the fourth highest level in Europe, after Iceland, Switzerland and Denmark. The Norwegian employment rate for women was 72.2 percent, and 78.8 for men. The employment rate tends to be higher for men than for women. Iceland has the highest employment rates in Europe; 80.8 percent for women and 88.1 for men.

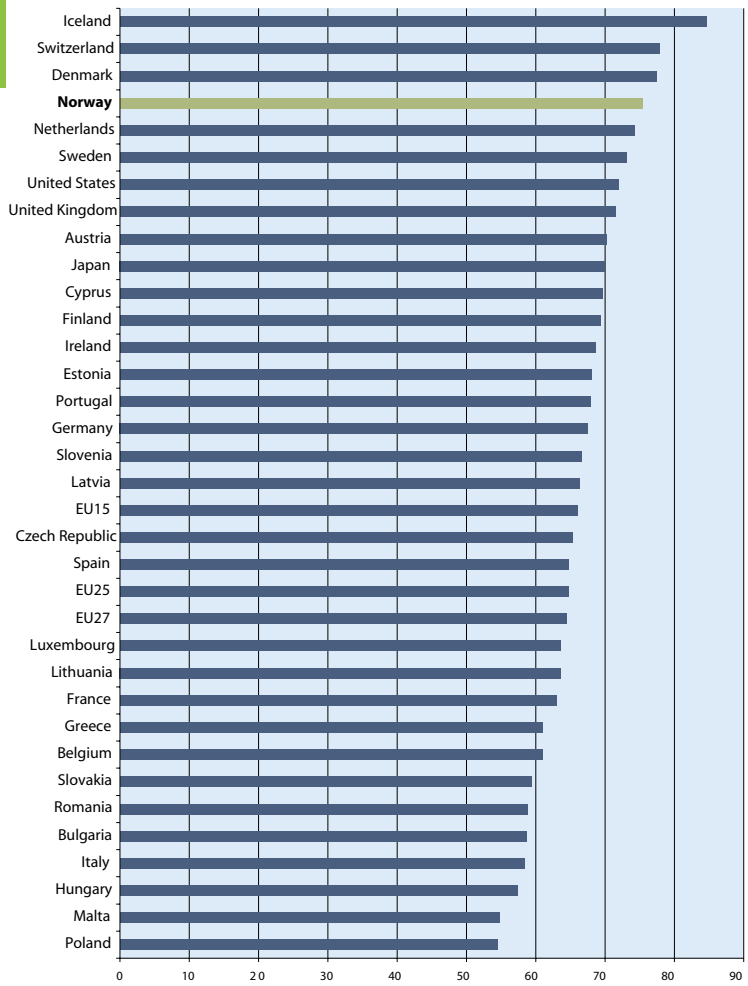
The Norwegian employment rate declined by 2.1 percentage points between 2000 and 2006; male employment by 2.9 percentage points, and female employment by 1.4 percentage points. In the same period, the EU countries experienced an increase in employment rates, primarily caused by increased employment among women. In Latvia, the total employment rate increased by 8.8 percentage points between 2000 and 2006, and in Spain, the employment rate for women increased by 11.9 percentage points.

Graph 10b shows intra-country differences between male and female employment rates. The smallest difference is found in Finland, followed by Sweden, Lithuania, Estonia and Norway. We note that the Nordic and the Baltic countries are characterised by relatively small differences between male and female employment rates. The largest difference is found in Southeast Europe.

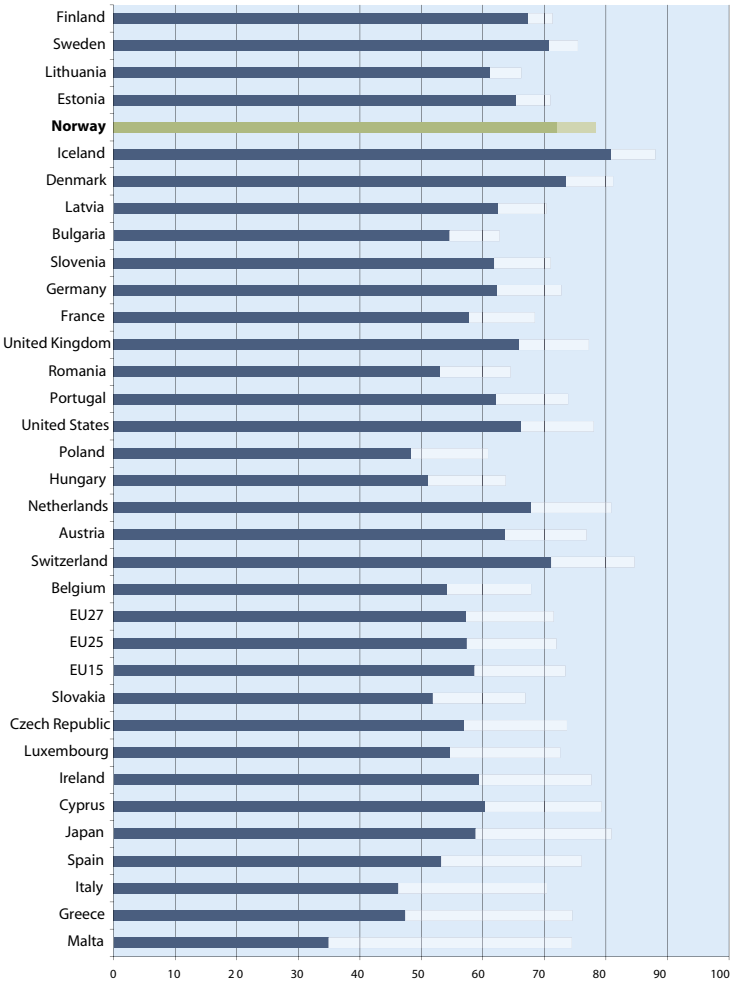
Since the indicator measures the number of persons employed and not the number of hours worked, it will not provide an accurate illustration of the extent to which a country is utilising its resources. For instance many persons could be working part-time only. Norway is characterised by a high incidence of part-time employment among women. The total number of hours worked per person is less in Norway than in many EU countries.[9]

9 Sources: OECD and Statistics Norway

10a. Employed persons aged 15-64 as a share of the total population in the same age group, 2006.



10b. Emplyed women (dark) and men (dark and light) aged 15-64 as a share of the total population of same age and sex, 2006.



The part of the labour force that voluntarily neither works, nor seeks work, does not in principle represent an available resource. Moreover, in order to conclude about the potential for increasing labour inputs, one needs to study the level of unemployment. The Nordic countries are characterised by low unemployment in European comparisons.

3.11 Employment rate of older workers (graph 11)

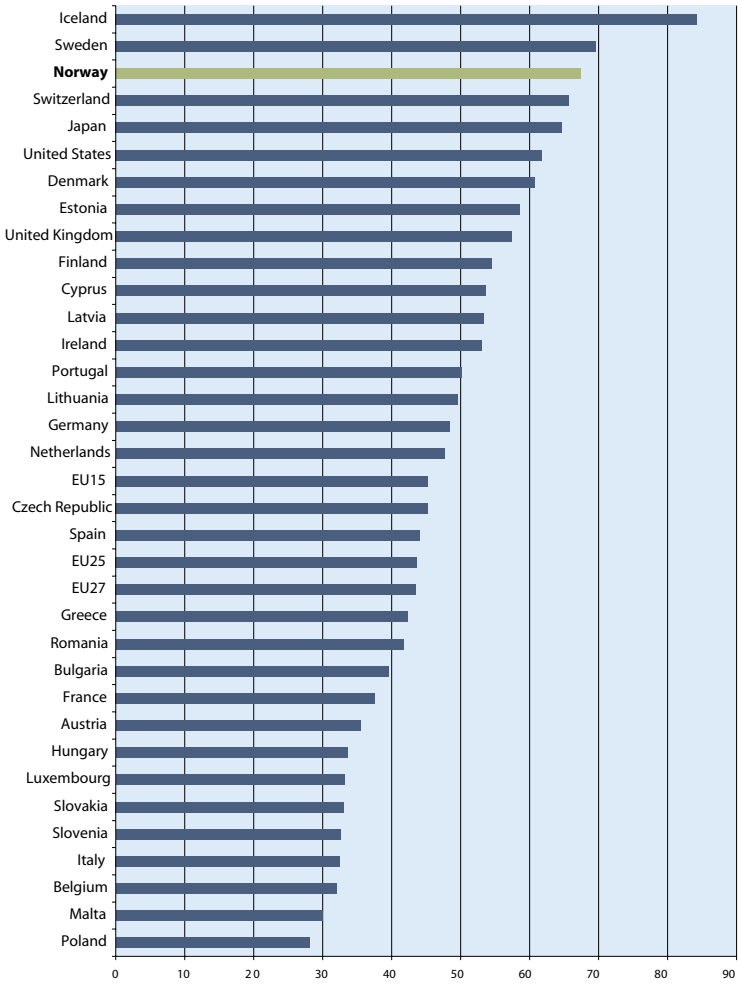
As for the employment rate of the population as a whole, the employment rate of older workers provides an indication of the extent to which one is mobilising this part of manpower resources. Projections show that many countries will experience a lack of labour in the future.[10] In such a situation, this indicator becomes even more relevant.

The employment rate for older workers is calculated as employed persons aged 55-64 years as a share of the total population of the same age group. This share will normally be lower than for the (working age) population as a whole. The EU aims for the employment rate of this group to reach at least 50 percent by 2010. In 2006, Norway registered an employment rate of 67.4 percent for older workers (as shown in graph 11). The other Nordic countries are also characterised by a high employment rate for older workers, and only Iceland and Sweden had higher employment rates than Norway for this group. For older women the employment rate in Norway was more than twice as high as the EU average. Indeed, one of the reasons for the high Norwegian employment rate for the population as a whole is the high Norwegian employment rate amongst older workers.

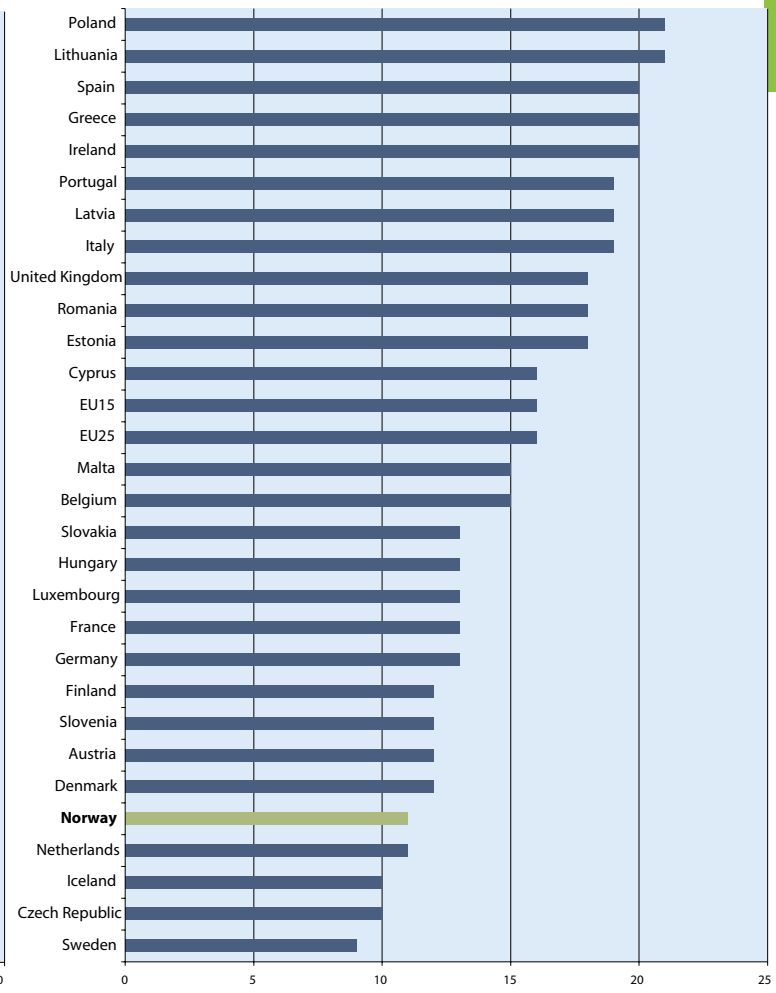
Most countries in Europe have experienced increases in the employment rate of this group over the years since 2000. For EU15, this employment rate has increased by 7.5 percentage points between 2000 and 2006. Norway already had a high employment rate in 2000, and has registered little change over the last few years. In total, the employ-

[10] Sources: OECD and the European Commission

11. Employed persons aged 55-64 as a share of the total population in the same age group, 2006



12. Share of persons with a disposable income after social transfers below 60 percent of the national median income, 2005



ment rate of older workers has increased by 2.2 percentage points over the period from 2000 to 2006.

3.12 At-risk-of-poverty rates (graph 12)

At-risk-of-poverty rates are defined as the share of persons with a disposable income below 60 percent of the national median disposable income after social transfers. The share of the population on low incomes may indicate whether policies to increase social equality have been successful. Major social differences may have a negative impact on the ability of a country to utilise its resources.

The available data for this indicator are somewhat limited. In 2005, Norway registered a rate of 11 percent, which is about the same level as the Nordic countries (as shown in graph 12). Generally speaking, the risk is higher for women than for men. There is a certain difference between countries. We note that the Czech republic has a lower at-risk-of-poverty rate than the Scandinavian countries, while Slovakia has the highest at-risk-of-poverty rate. This may to some extent be due to the countries applying somewhat different definitions of median income and social transfers in their calculations. It is therefore uncertain whether these rates are fully comparable between countries.

3.13 Dispersion of regional employment rates (graph 13)

High dispersion of regional employment rates suggests that manpower resources are being poorly utilised, and may indicate low geographical mobility. This is unfortunate from the perspective of value creation, and one therefore aims to facilitate mobility in view of achieving the best possible utilisation of manpower resources. Low mobility slows down resource reallocation, and results in overall capacity of the economy not being fully utilised.

Dispersion of regional employment rates is measured by calculating a coefficient of variation of employment across regions. Data availability for this indicator is limited. Graph 13 suggests that dispersion of regional employment rates in 2006 was highest in Italy and lowest in the Netherlands and Norway, both for the population as a whole, and for women and men taken separately. The large gap between the north and south of Italy means that Italy differs significantly from the other countries, and

13. Variations in unemployment across regions within countries, 2006

14. Long-term unemploymed (more than 12 months) as a percentage of the active population aged 15-64, 2006

contributes to increasing the EU average. Some countries have experienced a certain reduction in regional dispersion. This indicator suggests that both Sweden and Finland are characterised by greater regional dispersion than Norway is.

The small internal differences in Norway reflect a situation of generally low unemployment. It may also reflect that Norwegians are willing to move between regions to access interesting work and development opportunities. At the same time, Norway has focused actively on labour market measures in areas with high unemployment.

3.14 Rate of long-term unemployment (graph 14)

A certain level of short-term unemployment is a necessary aspect of economic change. However, the rate of long-term unemployment is one of the most important indicators of under-utilised resources in the economy. There is also a welfare aspect associated with long-term unemployment. Being excluded from the labour force over long periods of time may have significant social implications, which may by themselves reduce the ability to regain entry into the labour force.

This indicator measures the number of long-term unemployed, i.e. those unemployed for 12 months or more, as a percentage of the labour force. Graph 14 shows that there are large differences between countries. Norway is among the countries with the lowest registered rate of long-term unemployment in 2006, at 0.8 percent. The EU average was 3.9 percent. In 2006, Slovakia had the highest rate, at 10.2 percentage points. Moreover, many of the countries have reduced their rates of long-term unemployment since 2000.

When comparing rates of long-term unemployment between countries, it is a problem that countries have different ways of registering disabled persons. A person who would be defined as disabled in one country may choose to register as unemployed in another country, because it results in higher benefits. The most important variable is the proportion of the population excluded from the labour force. One approach to studying this variable is using the sum of long-term unemployed persons and persons receiving disability benefits, and then make inter-country comparisons. It may be noted that the Nordic countries have significantly higher non-participation in the labour market because of illness and occupational disability for the age bracket 25-59 years than the EU average.

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