

Summary of:

Energy Agreement for Sustainable Growth

[*Energieakkoord voor duurzame groei, 06-09-2013*]

Foreword

The *Energy Agreement for Sustainable Growth* gives voice to the willingness of many parties to work on making our society and our economy sustainable. A sustainable energy supply is an indispensable component of that process. The agreement unites divergent interests and brings together more than forty organisations – including central, regional and local government, employers' associations and unions, nature conservation and environmental organisations, and other civil-society organisations and financial institutions. It is based on the awareness that a long-term perspective means placing the common good far above the separate interests of either individuals or organisations and that it also means a growth path defined by energy and climate objectives as well as by feasible and necessary gains in competitiveness, employment, and exports.

Both the public and its political representatives feel a strong desire to make the Netherlands' energy supply more sustainable. That much was made clear by the groundswell of support for the House's motion of 26 April 2011 concerning a "National Energy Transition Agreement". The Rutte/Asscher Government is accordingly aiming, within an international context, to achieve a completely sustainable energy supply system by 2050. Society's wishes in this regard are being expressed in many different ways.

Given this background, the Social and Economic Council of the Netherlands (SER) took up the gauntlet for the Energy Agreement for Sustainable Growth by acting as a platform and by facilitating the process. It did so in its advisory report *Towards an Energy Agreement for Sustainable Growth*, which was adopted at its meeting on 16 November 2012. The conference kicking off the process that led to the agreement took place immediately after this meeting.

About the SER

As an advisory and consultative body of employers' representatives, union representatives and independent experts, the Social and Economic Council of the Netherlands (SER) aims to help create social consensus on national and international socio-economic issues.

The SER advises the Dutch government and parliament on the outlines of social and economic policy and on important legislation on social and economic issues. The SER's advisory reports ideally have a dual role: to help shape cabinet policy to ensure it enjoys broad support from society and to help ensure the business sector operates in a socially responsible manner.

The SER's advice is guided by the objective of social prosperity in its widest sense. This encompasses not only material progress (i.e., increased affluence and production), but also social progress (i.e., improved welfare and social cohesion) and a high-quality environment in which to live (i.e., environmental and spatial factors).

In its work, the SER is committed to detecting and interpreting signals from society. It offers various civil society organisations the opportunity to contribute specific expertise. The SER also shares information extensively with universities and policymakers in the Netherlands and abroad, and has regular contact with parliament and the various government departments.

The agreement summarised in this document is the result of more than six months of intense negotiations between more than forty representative organisations. Many dozens of scientists, business people, politicians and other Dutch stakeholders also contributed their ideas and insights to this process. They did so during meetings held throughout the country, at brainstorming and expert sessions at the Council's head office, through online consultation procedures, in letters that they submitted, or in in-depth interviews. The energy invested by all those involved ultimately resulted in the ambitious agreement that is set out in this document.

Continuity and support for the agreement require a proper anchoring mechanism and good governance. The starting point is to tackle the many action points and procedural arrangements that the parties have agreed in this context. The effectiveness of the agreement therefore depends on our success in anchoring the relevant arrangements and in monitoring their progress and incorporating learning effects. The Council will continue to facilitate this process by accommodating a committee set up especially for this purpose.

Wiebe Draijer
President of the Social and Economic Council

1. Introduction

In the *Energy Agreement for Sustainable Growth* [*Energieakkoord voor duurzame groei*], more than forty organisations have laid the basis for a robust, future-proof energy and climate policy enjoying broad support. They include central, regional and local government, employers' associations and unions, nature conservation and environmental organisations, and other civil-society organisations and financial institutions. This agreement offers long-term prospects with arrangements for the short and medium term, creates trust, and thus reduces investment uncertainty among both individuals and businesses. The agreement will give a major boost to investment and employment and help the faltering economy get back on track as quickly as possible. It will also minimise the burden on households and businesses.

The purpose of the Energy Agreement is to express the Rutte/Asscher Government's aim of achieving, within an international context, a wholly sustainable energy supply system by 2050. The parties to the Energy Agreement will strive to achieve the following objectives:

- a saving in final energy consumption averaging 1.5% annually. This is expected to be more than enough to comply with the relevant EU Energy Efficiency Directive;
- in this context, a 100 petajoule (PJ) saving in the country's final energy consumption by 2020¹;
- an increase in the proportion of energy generated from renewable sources from 4.4% currently to 14% in 2020, in accordance with EU arrangements;
- a further increase in that proportion to 16% in 2023;
- at least 15,000 full-time jobs, a large proportion of which will be created in the next few years.

The Energy Agreement also aims to strengthen the economic structure and to contribute to future sustainable growth. This will require us to strike the right balance between energy reliability, sustainability and affordability. To achieve the aims of the agreement, it will be vital to invest (and reinvest) in more energy-efficient products, production technologies and renewable energy. The Dutch economy has a large proportion of energy-intensive industries compared to other European countries. Recent developments in gas extraction and shale gas drilling mean that the price of energy and raw materials in Europe is higher than in the USA and the Middle East. As a result, companies competing in the international marketplace have grown more aware of the importance of efficient, sustainable energy generation and use. This agreement will also help improve the investment climate for energy-intensive industries by aiming to take the Netherlands to the top of the world rankings in terms of energy efficiency.

Energy in the Netherlands

With petrochemicals, greenhouse horticulture and transport accounting for a major share of the Dutch economy, the Netherlands has a high per capita energy consumption. It imports a considerable amount of energy, and consumes about a third of what it imports. Much of this imported energy is exported abroad in the form of crude oil and oil products. Compared with many other European countries, the Netherlands has a relatively large reserve of fossil energy carriers. Assuming that the quantity of natural gas produced in the Netherlands remains stable over the next few years, at the present rate of consumption the Netherlands has approximately twenty years' worth of reserves in its gas fields.

Source: CBS et al. (2011) *Monitor Duurzaam Nederland 2011*, section 3.3.

¹ By way of illustration: Reducing our final energy consumption by 1 petajoule is the same as reducing it by the annual average electricity and gas consumption of approximately 15,000 Dutch households.

This Energy Agreement offers scope for action by both businesses and households. It proposes new forms of financing so as to make a sufficient supply of investment capital available. It also ensures that the energy charges for households and businesses will not rise as sharply as envisaged in the Government's Coalition Agreement. An all-out effort to save energy and the smart roll-out of renewable energy will help maintain energy prices at manageable levels for households and businesses, bearing in mind that the average household's energy bill is 5 to 6% of its household income (or higher for low-income households).

The Netherlands's energy supply is tightly intertwined with Europe and the rest of the world. The parties to the agreement are fully aware of this international context, the relevant trends in the international supply of energy, and the potential of EU frameworks for achieving sustainable growth. Climate change is an international issue, and the present Energy Agreement therefore also includes measures that are to be implemented within the European context (for example improvements to the EU Emissions Trading System or ETS).

The Energy Agreement comprises ten basic components. Combined, they are mutually reinforcing and therefore constitute a comprehensive package of arrangements. The parties to the agreement have laid down the objectives, the appropriate measures, and the associated guarantees. Ultimately, the Energy Agreement marks the start of the way forward for the coming years. The parties have expressed their commitment, in no uncertain terms, to pursuing that way forward, in the full knowledge that they will need to tackle additional challenges before they can achieve the objectives that the Energy Agreement sets out. That is therefore also the essence of the Energy Agreement and the approach to tackling the climate problem: a package of arrangements for getting down to work as efficiently as possible, with each party accepting its own responsibility, combined with the agreement to work together on the additions and adjustments necessary to actually achieve those objectives.

2. Ten basic components

2.1 Saving energy

Saving energy is a key point and is the *first basic component* for achieving a sustainable energy supply. Saving energy contributes to environmental objectives, reduces the energy bill, improves the competitiveness of Dutch businesses, and boosts employment. The parties' aim in the Energy Agreement is to achieve an annual saving of 1.5% in final energy consumption. This is expected to be more than enough to comply with the Energy Efficiency Directive. The parties have agreed on a package of measures that is expected to save some 100 PJ by 2020. The arrangements for saving energy focus both on the built environment and on increasing energy efficiency in industry, agriculture, and the rest of the commercial sector. The arrangements for saving energy in mobility and transport form part of basic component 7.

This objective is linked to two evaluation points: by the end of 2016 at least 35% will have been achieved and by the end of 2018 at least 65%. Should it appear that we are not likely to achieve the agreed objectives, then additional measures will be put in place. These may be more binding and/or tax-related measures, or other measures – voluntary or non-voluntary – to make the aim of saving 100 PJ more likely. Like the measures specified in this agreement, the package of measures will focus on the end-user and therefore not on the supplier.

Built environment

There are numerous opportunities for achieving significant energy savings in the built environment. The basic principle is that individuals and businesses have an interest themselves in saving energy and will shoulder responsibility for doing so. A combination has therefore been chosen of information provision, awareness-raising, reducing the burden, and funding support. A revolving fund will be established for energy saving in the built environment amounting to some EUR 600m. This

national energy-saving fund will already become operational in 2013 with a component focusing on owner occupiers – meaning that owners of listed buildings will also be eligible for financing from the fund – making it possible for this large group of individuals to take profitable measures to save energy. Energy companies will be given the opportunity to offer customers more financing options, with loans being repaid via the energy bill. Financing options and any future policy measures can make use of the energy performance certificate, to which favourable financing can be linked. All homeowners, landlords, and tenants who do not yet have an energy label will be assigned an indicative label for their home in 2014 and 2015, based on a uniform method applying to the whole country. This label indicates the home's energy performance and serves to raise awareness. The intention is to conclude an agreement in 2013 between central government and the Association of Netherlands Municipalities (VNG) on providing municipalities with active support concerning local and regional energy saving and energy generation.

The parties to the Voluntary Energy Saving Agreement for the Rented Sector [*Convenant Energiebesparing Huursector*] have committed themselves to the agreed objectives of ensuring an average of Label B for corporations and a minimum of Label C for 80% of private landlords by 2020². In that context, central government is providing EUR 400m in funding for landlords in the subsidised rented housing sector³ for the purpose of investment in energy-saving measures between 2014 and 2017, with the aim being to contribute to achieving the objectives of the Voluntary Agreement. In the short term, this measure will promote a substantial wave of investment in making rented housing energy-efficient.

For all types of public and other real estate, there will be an independent centre of expertise which will provide support in identifying the most effective measures in the area of energy efficiency. In addition, implementation and enforcement of the Environmental Management Act [*Wet milieubeheer*] – with an obligation to implement energy-saving measures with a cost-recovery period of five years or less – will be substantially improved, for example with the aid of lists of specific approved measures. Municipalities and provinces (the clients of the Regional Implementation Services [*Regionale Uitvoeringsdiensten*]) will prioritise enforcement of the energy-saving obligation in that Act. Finally, there will be a pilot project aimed at continuing, as of 2016, with a system for Energy Performance Assessment ("EPA") which can provide effective assistance to businesses in achieving and enforcing measures with a cost-recovery period of five years or less, in accordance with the Act. Specific aspects of the impact of the pilot project will be evaluated towards the end of 2015. The EPA system will be introduced in 2016 in those sectors in which the pilot project has shown that it is effective.

Industry, agriculture, and the commercial sector as a whole

Industry, agriculture, and the commercial sector as a whole see increased energy efficiency as an opportunity to boost the competitiveness of energy-intensive businesses, to create employment, and to achieve climate objectives in a cost-effective manner. The energy-intensive sector of industry aims to become an international leader in energy efficiency. An independent centre of expertise will be set up to assist businesses and funding bodies in identifying the most effective measures in the area of energy efficiency in industry and agriculture. The impending disappearance of combined heat and power (CHP) will not help in this regard. The Environmental Management Act also needs to be implemented and enforced more effectively in industry, the agricultural sector, and the commercial sector in general. The large energy-intensive companies, those covered by the ETS, will join with government in endeavouring to supplement the Long-term Voluntary Agreement on Energy Efficiency [*MEE-convenant*] with a framework of company-specific (i.e. one-to-one) agreements. These will focus on improving the energy efficiency and competitiveness of the companies concerned. There will also be an EPA pilot

² The energy label for housing indicates how energy efficient a house is compared with similar houses. The categories run from A++ to G, with A++ being the most energy efficient and G being the least.

³ The Netherlands has a very large subsidised rented housing sector compared to many other countries. It accounts for almost a third of the country's entire housing stock.

project (with evaluation) for other companies (i.e. non-MEE companies) as outlined above under “built environment”.

Cost-effective utilisation of industrial waste heat deserves to be prioritised, and the parties will produce a coherent action plan for utilising the potential of this technology in the Netherlands. The possibilities of a regional heat infrastructure will be investigated for various parts of the country, based on and comparable with the proposals already made by the Rotterdam region.

There is broad support for an ambitious programme to save energy in the greenhouse horticulture sector. This sector, the authorities, and the environmental organisations have agreed that an improved CO₂ system for this sector should take effect no later than 1 January 2015. Agreement has been reached with the sector that – in addition to the current policy – an energy saving of 11 PJ will be achieved by 2020.

2.2 Scaling up renewable energy generation

The *second basic component* of the programme discussed involves scaling up renewable energy generation. This demands a strong focus on various resources such as onshore and offshore wind power, various types of local energy generation such as solar energy, and the use of biomass.

Renewable energy in the Netherlands

Renewable energy accounted for 4.4% of total energy consumption in the Netherlands in 2012. Biomass accounts for more than 70% of all renewable energy, and wind power for slightly less than 20%. Other sources – hydropower, solar energy, geothermal energy and ambient heat – make only a small contribution. Electricity generated by wind turbines, hydropower plants, solar panels and biomass accounted for more than 10% of all electricity consumption in 2012, approximately a half percentage point more than in 2011. The share generated by wind turbines rose by 5% in 2012 owing to an increase in capacity. The share accounted for by biomass remained virtually static. Solar energy generation more than doubled, but it still represents no more than 2% of the overall production of renewable electricity.

Renewable sources of energy continued to provide just over 3% of the Netherlands’ heat in 2012. Consumption of renewable energy in the transport sector rose from 4.6% in 2011 to approximately 5% in 2012.

The main policy measure stimulating the use of renewable energy is the “SDE+” scheme (SDE stands for “Sustainable Energy Incentive”). The scheme covers the difference between the price of grey energy and the price of sustainable energy for a 5, 12 or 15-year period, depending on the technology used. The budget for renewable energy will increase gradually to EUR 3.8bn in 2020.

Sources: CBS (2013) *Hernieuwbare energie in Nederland 2012*; and CBS et al. (2011) *Monitor Duurzaam Nederland 2011*, section 3.3.

The parties will pursue the Dutch Government’s objective of generating 16% of the country’s energy from renewables. The basic premise is a cost-effective rollout that provides certainty for investors, creates additional employment, triggers innovations that reduce costs, and contributes to boosting the competitiveness of Dutch companies in this sector. Combined with ambitious energy-saving measures, the parties hope that this approach will allow them to achieve the target of 16% renewables by 2023 and 14% by 2020. The main components of large-scale renewable energy generation include:

- Scaling up offshore wind power to 4450 Mw, operational in 2023. The existing and planned offshore wind power capacity comes to a total of some 1000 Mw. In addition to this, a total of 3450 Mw will be contracted for by means of phased procurement procedures commencing in 2015 and increasing as follows: 450 Mw (2015), 600 Mw (2016), 700 Mw (2017), 800 Mw (2018), and 900 Mw (2019). This assumes that the cost of offshore wind power will be cut by some 40% in the years ahead. This will take the form of tenders, in which this cost decrease is a critical criteria. With a view to future cost reduction, central government will invite parties to submit proposals so that an innovative demonstration wind farm can already be decided on in 2014. The Government will also ensure that there is a robust legal framework that makes it possible to scale up offshore wind power. The basic assumption is that the wind farms will become operational within four years of a decision being taken on funding, and will then make use of state-of-the-art technology.
- In the case of onshore wind power, there will be investment within the frameworks agreed with the provinces in order to achieve 6000 Mw by 2020. Wind farm investors will introduce a participation model enabling local residents to participate actively in the planning and operation of wind farms. For the period after 2020, additional capacity will eventually be sought within the frameworks discussed with the Association of Netherlands Provinces (IPO).
- Renewable energy generation from the various other sources will be tackled ambitiously. There are a number of factors other than financial ones that limit the scaling up of renewable energy. It is crucial to tackle these factors if progress is to be made. The parties will develop workable solutions for these issues as soon as possible, but by no later than 1 July 2014, and will then commence implementation of them.
- The parties agree that promoting the use of biomass by coal-fired power stations will not exceed the level of 25 PJ. In the context of the best possible use of biomass and strict sustainability criteria, methods will be elaborated for how the 25 PJ restriction on biomass, the type of support, and the possible use of a procurement procedure can be given shape within the SDE+.
- This approach can bring about a substantial reduction in the SDE+ surcharge on the energy bill for households and businesses as compared to the estimates in the Government's Coalition Agreement. Based on the latest estimates, this will amount in total to some EUR 2.25bn up to 2020. Within the SDE+, EUR 375m will be available in that same period to ensure that the objective of generating 14% of the country's energy from renewables by 2020 can be achieved. Should it turn out that some or all of these funds are unnecessary, they will be deployed alongside the above-mentioned EUR 2.25bn in order to reduce costs. This does not represent the total eventual reduction in the balance of costs as a result of the Energy Agreement, given that those costs will be partly offset by the costs of supplementary measures elsewhere.
- An offshore network will be constructed where this is more efficient than connecting wind farms directly to the national high-voltage network. Responsibility for this will be allocated to TenneT.⁴ The Government will take a decision on the design and requirements in the near future; if necessary, this will then be incorporated into the relevant legislation. In order to introduce legislation that will create robust scope for a substantial role for sustainable energy generation and that takes account of the consequences of intermittent generation for the power grid, the parties will contribute to the overall reform of the Electricity and Gas Act [*Elektriciteits- en Gaswet*] that has been instituted for this purpose. Progress towards achieving the 14% target for 2020 and the 16% target for 2023 will be assessed in 2016 according to a set of clearly defined criteria. A decision will also be taken on continuing the programme towards the 14% and 16% targets, partly in the light of international trends and opportunities.

⁴ TenneT is the electricity transmission operator in the Netherlands and a large part of Germany. TenneT is responsible for the continuity of the electricity supply.

2.3 Decentralised energy generation

Growing trend towards local energy production

Diversification is a growing and significant trend in energy production. More and more businesses and consumers are taking steps to meet their own energy needs. A drop in the price of solar panels has made this more financially attractive for consumers, who also appear to want control over their own energy supply. A vibrant range of private and local initiatives is developing, including district heating companies, electric-transport projects, solar-energy collectives, energy generated from waste, biomass fermentation plants, wind-energy operators, and energy-neutral building projects.

What unites these initiatives is that they are focused on sustainability and alternative sources of energy. Although limited in scope, these new forms of energy generation are growing rapidly. The major power companies have also made important investments in renewable energy, specifically wind energy, biomass co-firing, and hydropower.

Source: ECN et al. (2010) *Energietrends 2012*, p. 3.

The *third basic component* of the Energy Agreement is the decentralised generation of renewable energy by people themselves and by cooperative initiatives. People will be given more options for generating renewable energy themselves, with local and regional initiatives being supported – where necessary and possible – by municipalities, provinces, and central government. With effect from 1 January 2014, tax relief of 7.5 eurocents per kWh will be introduced in respect of renewable energy generated by a cooperative or by an association of owners if the energy is then also utilised by small-scale consumers, and if the members of the cooperative or association and the installations are located within a “postcode rose” (a four-digit postcode plus adjoining postcode areas). The parties agree that this arrangement should be made as simple and efficient as possible, with energy providers making arrangements with central government to ensure this. The parties have agreed that the costs incurred by providers in implementing this tax relief arrangement can be charged on to energy cooperatives, associations of owners, or their members that have benefited from the arrangement. Should the tax relief arrangement be modified with a view to investment certainty, continuity for existing users will be guaranteed by means of a transitional arrangement. The tax relief will be covered by an increase in the energy tax. The arrangement will be evaluated in four years’ time on the basis of usage.

2.4 Energy transmission network

The energy transition will have far-reaching consequences for the networks whose task is to bring together supply and demand. The *fourth basic component* of the Energy Agreement ensures that the energy transmission network is ready for a sustainable future. The parties have agreed that they will prepare thoroughly for this changing future so that changes can be made quickly when they are necessary and desirable.

Measures that will make the energy system (gas, electricity and heat/cold storage) more flexible include the following.

- The development and introduction of smart grids and the introduction of demand-side management in order to shift the pattern of demand.
- The development of storage capacity, for example by continuing to encourage electric transport and the infrastructure of charging stations it requires. Another

possibility is to convert electricity into gas, which can then be stored. Such measures could make power-to-gas and/or dual firing more attractive (the choice for electricity or gas would depend on the price of energy).

- It is crucial to conduct experiments to study the impact of these innovations on the energy infrastructure. Such experiments should be aligned as closely as possible with the government's policy on key economic sectors.

In the context of European cooperation, the Dutch government, energy companies, grid managers and businesses have committed themselves to:

- Closer international cooperation within the pentilateral Energy Forum (Benelux, Germany, France, Austria and Switzerland), with other countries in the North Sea region (United Kingdom, Denmark, Norway, Sweden and Ireland) and bilaterally with Germany. Such cooperation is needed to properly coordinate national plans for the large-scale generation of renewable energy and the related commercial and grid development.
- Promoting an effective, supportive regulatory EU framework that will provide for a sound investment climate in Europe. That will require the scrupulous implementation of measures under the EU's Third Energy Package. TenneT and Gas Transport Services will take up this challenge where possible in ENTSO-E and ENTSO-G respectively.
- An effective regional approach towards integrating the electricity and gas markets. The investments needed in production facilities and grids will also require the efficient deployment of capital and resources and a large enough return on investment to attract investors.
- Transparent procedures in international projects, in particular when issuing permits and inviting tenders for large-scale offshore wind farms and the construction of cross-border grid infrastructures. The focus on a more European regulatory framework will encourage more coherence in investment and a more effective cost-benefits analysis per investment.

2.5 EU Emissions Trading System (ETS)

As the *fifth basic component* of the Energy Agreement, a properly functioning EU Emissions Trading System (ETS) is a crucial factor in the long-term transition to a sustainable supply of energy. The parties agree that an improved ETS must meet four requirements:

- it must offer effective volume incentives to attract investment in CO₂ reduction and CO₂-efficient growth;
- it must promote cost-efficient CO₂ reduction;
- it must maintain the competitiveness of energy-intensive companies that operate internationally, based on the criteria for best-performing companies in the sector worldwide;
- it must improve prospects for expanding the ETS system internationally.

The parties to the Energy Agreement have committed themselves to a joint lobby in Brussels to press for implementation on 1 January 2020 of the following improvements to that system. This package of improvements can only be considered when taken as a whole:

- a) tightening up of the reduction path for the ETS cap aimed at achieving the long-term goal of an 80 to 95% reduction in greenhouse gases for the whole economy by 2050;
- b) securing the position of internationally competitive companies ("carbon leakage companies") by a 100% free allocation of rights based on realistic benchmarks and actual production, based on the best performance in the sector;
- c) compensation for the indirect (electricity) costs, based on the best performance in the sector.

In anticipation of structural improvement measures to be implemented at EU level, the Netherlands should cooperate more closely with its neighbours, for example

other like-minded (Member States, or within the Pentalateral Energy Forum (Benelux, Germany, Austria, Switzerland and France). It can cooperate with these countries to prepare and introduce arrangements concerning the labelling of electricity and the coordination of incentive measures for renewable energy, and to prepare proposals to improve the ETS within the EU.

Finally, the parties to the Energy Agreement advocate establishing a common denominator that will allow parties to easily compare and coordinate the cost-effectiveness of CO₂-reduction, energy-efficiency and renewable energy measures.

2.6 Energy generation from fossil fuels and coal-fired power stations

Up to 2050, fossil fuels will remain an important component in our energy consumption, even though the Energy Agreement focuses on achieving a reduction in CO₂ emissions of 80 to 95% by 2050, with renewables accounting for 16% of energy generation by 2023. Gas-fired power stations will continue to be important in the northwest European electricity market.

In this *sixth basic component*, the parties have agreed that the capacity of the coal-fired power stations built in the 1980s will be minimised as part of the transition to the sustainable supply of energy (in connection with the arrangements concerning renewable energy in the second and third basic components). More specifically, this means that three coal-fired power stations will be closed down with effect from 1 January 2016, and that the two remaining power stations (Maasvlakte I and II) will close on 1 July 2017. Local employers and trade unions will ensure that appropriate measures – “work-to-work” programmes, redundancy plans, etc. – will be put in place for employees who lose their jobs when these facilities are shut down. The closing down of old coal-fired power stations is an important part of the mutual arrangements set out in this agreement. Any price increases arising from the closing down of old coal-fired power stations (which would at any rate be very small) will be mitigated by the sharp rise in renewable energy and justified by the anticipated environmental effects. This part of the agreement is subject to review by the Netherlands Authority for Consumers and Markets (ACM).

If the power stations referred to above have been shut down by the dates mentioned, the exemption for electricity production in the tax on coal will be reintroduced on 1 January 2016. The connection between these arrangements as set out in the Energy Agreement will be anchored in separate agreements between central government, individual companies, and the environmental movement.

If we are to achieve an entirely sustainable energy supply system in the long term, then the capture, use, and storage of CO₂ (“CCS”) will be unavoidable. CCS can be applied both by industry and by gas and coal-fired power stations. Central government will take steps to produce a long-term strategy regarding the role of CCS in the transition to such an entirely sustainable system.

2.7 Mobility and transport

The *seventh basic component* of the Energy Agreement consists of mobility and transport measures intended to make traffic and transport more efficient and mobility more sustainable. The parties have agreed on ambitious targets, namely a 60% reduction in CO₂ emissions by 2050 (compared to 1990), with a reduction of 25 Mton (-17%) in 2030 en route to attaining that target. In order to achieve this, the parties have drawn up a green agenda for growth setting out long-term prospects and short-term measures. Steps will be taken in twelve key areas. The parties will shortly produce a shared overall strategy concerning the future fuel mix, public-private partnership in preparing the market, source-specific policy and Dutch leadership, and arrangements regarding the public infrastructure for charging electric vehicles. Other important topics will also be dealt with, including the use by the transport sector of a uniform measuring method for reducing CO₂.

These matters will be worked out in the near future, with central government taking the lead as regards the policy measures and cooperating with the organisations involved. In the context of the targeted energy saving of at least 100 PJ energy (final) for the economy as a whole, the parties have agreed that the transport and mobility sector will contribute by saving an expected 15 to 20 PJ by 2020 compared to the reference estimates produced by the Energy Research Centre of the Netherlands (ECN) in 2012, assuming that this corresponds to a reduction of 1.3 to 1.7 Mton compared to the trend-based forecasts for 2020.

2.8 Employment opportunities

The Energy Agreement will produce significant employment opportunities in the installation and construction sectors and in the longer term in the renewable energy sector; this is the *eighth basic component* of the Energy Agreement. The aim is to capitalise on these opportunities and in the period from 2014 to 2020 to create at least 90,000 additional full-time equivalents. This equates to an employment gain of an average of at least 15,000 additional full-time jobs. In the short term, a start can be made on a cross-sector training pilot to prepare people for the job opportunities that become available in the construction and installation sector. The pilot will involve collaboration between educational institutions, sector-specific training centres, individual companies, and regionally organised employers' associations and trade unions to provide retraining and further training ("green skills") for professionals and jobseekers. The parties also attach a great deal of importance to the principles set out in the 2013 Social Agreement between employers' associations, trade unions and the government [*Sociaal Akkoord 2013*] regarding "decent work" [*Gewoon Goed Werk*] and the principles of international corporate social responsibility (OECD guidelines). This involves the quality aspects of work: decent employment terms, working conditions and employment relations. It is also important for there to be a fair distribution of the burden arising as a result of the Energy Agreement, with lower income groups within the population and businesses being spared as much as possible.

2.9 Energy innovation and energy export

The *ninth basic component* focuses on energy innovation and energy export. The aim is for the Netherlands to be in the top 10 of the cleantech rankings by 2030⁵. That will be possible by excelling in smart sustainability solutions as a result of an inviting climate for investment and growth for both existing and new cleantech companies. On the way to achieving that aim, the intention is to quadruple the economic value of the clean energy technology chain by 2020 compared to 2010 through increased turnover both in the Netherlands and abroad. There will be close links to the approach adopted by the Energy Key Economic Sector⁶ and collaboration with other key economic sectors. The method used to achieve these aims consists of six elements, namely financing, domestic market development, international market development, establishment of legislation and regulations, connecting up with the SME sector, and human capital. Specific SDE+ funds will be utilised for demonstration projects that contribute to a reduction in the costs for renewable energy and thus to the cost-effective achievement of the target of 16% renewables. How this will be done – and to what extent – will be worked out before the end of 2013. Government funding will also be made available for an innovation programme for demonstration projects to accelerate the commercialisation of cleantech activities for export. The budget for this will increase from EUR 25m in 2014 to a structural EUR 50m from 2017 on.

⁵ In 2012, the Netherlands ranked 14th in the Global Cleantech Innovation Index. See: Knowles, V. et al. (2013) *Coming Clean: The Global Cleantech Innovation Index 2012*, WWF.

⁶ The Dutch government has opted for a long-term strategy focusing on the sectors in which the Netherlands ranks among the top countries in the world and which are a good fit for the country's strengths. One of these key economic sectors concerns energy.

2.10 Funding programme

The *tenth basic component* will be an extensive funding programme focusing on freeing up the enormous amount of investment needed for the transition envisaged in the Energy Agreement. Agreement has been reached with financial parties and various umbrella organisations (the Dutch Banking Association/NVB, the Dutch Association of Insurers, and the Federation of the Dutch Pension Funds) on an approach that will make it attractive to invest in energy saving and renewable energy. A funding programme will also be designed to improve the financing feasibility of major renewable energy projects. The programme will also focus on smaller and often decentralised projects that find it difficult to create an effective financing structure. Primary responsibility for large-scale investment projects will remain with the banks that finance the project phase of these major projects. The NVB, the Dutch Association of Insurers, the Federation of the Dutch Pension Funds, and central government have agreed to keep an open mind in the coming months while developing plans for transforming bank financing of large-scale projects into capital-market financing by Dutch and foreign institutional investors. The Minister of Economic Affairs will assign a coordinator to design the method for implementing the transformation. The NVB and central government will jointly set up a Centre of Expertise for Funding.

3. Effects of the Energy Agreement

Three expert knowledge institutions have calculated the effects of the Energy Agreement.⁷ They used bandwidths for the projected effects at various points, mainly because the arrangements can still be elaborated in different ways. In addition, some arrangements excluded from the calculations are still uncertain and must be hammered out in detail. In view of the foregoing, the parties involved have agreed that they will keep close track of progress and take timely action or introduce supplementary measures when required in order to achieve the objectives of the agreement.

Energy efficiency

In the Energy Agreement, a saving in final energy consumption averaging 1.5% annually is interpreted to mean a 100-petajoule (PJ) saving in final energy consumption in the Netherlands by 2020.

The combined energy saving effect will amount to 50 to 107 PJ. The calculations concern both the present estimated effects of specific measures (between 22 and 60 PJ) as non-specified undertakings and possible additional measures. Under the Energy Agreement, the parties have undertaken to explore and adopt supplementary measures if results lag behind the 2020 target of 100 PJ ensuring that the target can in fact be achieved. It will become clear in the period ahead whether supplementary measures are in fact necessary.

EU Energy Efficiency Directive

Based on the ECN/PBL calculations, the parties may assume that the overall package of measures will produce effects that come within the EU Directive's bandwidth of a 1.5% saving in final energy consumption. The parties believe that the efficiency measures (as calculated) and the supplementary package of non-specified measures offer sufficient potential to achieve the EU's target.

Renewable energy

The calculations also show that it will be possible to attain the target of generating 14% of all energy from renewable sources by 2020. The approach described in this agreement will produce results at the top end of the bandwidth, with renewables accounting for 14% of all energy in 2020 and 16% in 2023. According to PBL/ECN, however, such results will necessitate utilising the reserve budget of EUR 375m

⁷ Energy Research Centre of the Netherlands (ECN), The Netherlands Environmental Assessment Agency (PBL), and Economic Institute for Housing and Construction (EIB).

provided for in the agreement. Should it become evident in the years ahead that the Netherlands will be unable to achieve the 2020 target under the present arrangements, supplementary measures will be introduced.

Labour market effects

The number of jobs to be created between 2013 and 2020 by implementing the Energy Agreement will amount to between 103,000 and 161,000 man-years, according to the calculations. Approximately half of the jobs so created will be in the built environment; most of the rest will be related to renewable energy. These are the effects of the measures described above and the direct investments that they will attract (an estimated EUR 13 to 18bn). The net employment effect, 59,000 to 86,000 man-years, will be lower owing to displacement and substitution effects. Various other employment effects have not been allowed for in these calculations. Based on the foregoing, the parties have concluded that the target of 90,000 man-years in the 2014-2020 period is feasible. The anchoring mechanism will see to it that the employment targets are in fact achieved.

Burden for households and businesses

On balance, the Energy Agreement will also considerably ease the burden on households and businesses compared with the plans set out in the Rutte/Asscher Government's Coalition Agreement. One important reason is the EUR 2.3bn saving in the SDE+ scheme between now and 2020, the result of more moderate growth path towards sustainable energy (with 2023 as the target date for 16% renewables instead of 2020) and a reduction in the cost price through innovation. Some of the EUR 2.3bn saving will be used to finance other arrangements in the Energy Agreement and some to lighten the burden for households and businesses.

Investment incentive

In estimating the effects for businesses, what has not been included is the effect of the investment incentive produced by the transition that the agreement is driving. According to the EIB, the various forms of direct investment arising from the measures allowed for in the agreement will amount to an estimated EUR 13 to almost 18bn between 2013 and 2020. These investments will play a significant role in achieving the agreement's objective, i.e. sustainable growth for the Netherlands, and will also provide the necessary short-term employment incentives in today's difficult economic circumstances.

4. Anchoring mechanism

One important factor in ensuring a successful energy transition in the years ahead will be consistency in the policy deployed by government and the other parties, including during implementation and when adjustments are necessary. Central government will be responsible for elaborating, implementing, executing, and evaluating the policy measures specified in the Energy Agreement, and will be accountable in this regard to Parliament. The organisations involved believe that the agreement provides the right anchoring mechanism for the entire package of targets, measures and any necessary supplements. The representatives of central government, employers' associations, unions, nature conservation and environmental organisations, and other civil-society parties and financial institutions have agreed to share that responsibility by signing the Energy Agreement. The basic principles for satisfactory assurance and good governance are:

1. that the parties are responsible for implementing the components allocated to them; no additional supervision or monitoring is desirable in this regard;
2. that the parties wish to be jointly responsible for the successful implementation and elaboration of the Energy Agreement, including social engagement, and therefore wish to continue their collaboration;
3. assurances concerning the objectives.

The parties have agreed that, to that end, a standing committee will be appointed within the Social and Economic Council. It will have a broad composition and full

participation of all the parties to the Energy Agreement, including central government. The parties have also agreed that this committee will monitor progress regularly and amend measures when required to achieve the agreed targets.

A major evaluation of the Energy Agreement will take place in 2016, with progress being assessed and a decision being taken on the follow-up – with a view to achieving the agreed targets for 2020 and 2030 – including exploring supplementary measures. The government will take the lead in this, with account being taken of the importance of long-term consistency in order to maintain a good investment climate.

5. Collaboration

The ten basic components of the Energy Agreement are highly interdependent and mutually reinforcing in terms of their effectiveness. Export promotion, for example, is only possible if the country has a credible and ambitious programme for energy saving and renewable energy generation. Funding can also only function properly if there is a consistent policy for scaling up renewable energy. Employment programmes are essential to increase the workforce available for large-scale installation and insulation work. During its term of office, the Government will reserve some EUR 70m to fund various support measures, for example the agreement to support municipalities in their local and regional energy conservation and generation efforts, the indicative energy label, the centre of expertise for energy saving, improved enforcement of the Environmental Management Act, the EPA pilot project, the introduction of the funding programme, and the activities to promote energy innovation and energy export.

Each of the parties involved is directly responsible for implementing the steps set out in the Energy Agreement, the main provisions of which are outlined in the present document. It therefore marks the start of the long way forward in which these parties have not only assumed responsibility for reaching agreement but have specifically committed themselves to the follow-up steps that will be necessary to achieve the long-term objective. The basic premise is individual responsibility and involvement on the part of individuals, businesses, and civil-society organisations, combined with guarantees for a joint approach towards progress and any adjustments that must be made.