



**Role and functioning of national and sub-national
climate change legislation and climate committees in
implementing the Paris Agreement:
case studies and best practices**

Brussels, July 2016

Impressions and conclusions by the Chairman

The Energy Working Group of the EEAC was very kindly hosted by the Dutch embassy in Brussels on 17 June 2016. On my way to the embassy I passed the attractively restructured Schuman Roundabout on the Rue de la Loi ('Law Street'). The latter, by the way, is coincidental to the subject of that meeting: the role and functioning of climate change legislation. This subject is rapidly taking centre stage in the energy policy debate.

In another coincidence, I noticed a small statue of Sicco Mansholt in the entrance hall of the embassy. Mansholt was born in the northernmost region of the Netherlands, which I personally know very well.

Sicco Mansholt was the driving force behind European agricultural policy in the post-war years as European Commissioner for Agriculture and later as President of the Commission. During this time major reforms were needed to ensure sustainability and safeguard the security of supply. Similar reforms are needed in energy policy to ensure sustainability and safeguard the security of supply. A possible parallel?

Returning to the topic of the meeting, I would conclude that the most notable aspects of the Paris Agreement in relation to climate change legislation are enforcement, the focus on processes, and the number of contract partners. Whereas the Agreement is ambiguous from a legal perspective, the approach based on the idea of Nationally Determined Contributions (NDCs) is strong. An excellent introduction to all these issues was provided in the keynote speech by Professor Richard Macrory.

A complicating factor in the ratification of the Paris Agreement is that the European Union will submit an NDC for the Union as a whole, and therefore needs an effort-sharing agreement between Member States. Diverse as Europe is, this already raised the fear expressed in the Annual State of the EU: that the Paris Agreement will enter into force without Europe.

Climate change laws display considerable variation, depending on the specific characteristics of Member States. The applicable UK legislation is perhaps best known: without legal enforcement and with a committee of independent advisers. Keynote speaker Dr Pieter Boot noted that different legislative traditions will result in a different set-up of potential climate change laws, and that the various driving forces will have to be taken into account. These range from security of supply and industry opportunities to climate change mitigation and opposition to nuclear energy. It was interesting to learn from Dr Boot's overview that existing climate change laws were broadly supported in parliaments across Europe. Left-wing governments are more likely to pass framework legislation.

At the meeting we examined best practices, and a wide range of cases were presented and discussed. Roughly speaking, we can identify three types of approaches to climate change legislation. The UK approach is top-down, and the German and Danish approach is more bottom-up. The Dutch approach falls between these two extremes. Our so-called 'polder model' makes us jointly responsible for the results, but at the same time we have some top-down control when needed.

A climate change law, however compact or detailed its formulation, will have enormous impact on the economic structure of the relevant Member State and Europe as a whole, when taking into account the enormous CO₂ emissions reduction it should effectuate. It is this aspect that brings us back to Sicco Mansholt. Mansholt's Common Agricultural Policy reformed the structure of the sector in order to eliminate food shortages and safeguard the security of supply. I am still puzzled about the similarities and contradictions between the two dossiers, and what we can learn from them. Any thoughts on the energy-related issues raised here are also welcome.

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Mainline Summary

The Paris Agreement: Implementation and the Potential of Climate Laws
Professor Richard Macrory, University College London

In his opening keynote speech, Professor Macrory called the Paris Agreement an historical achievement which clearly indicates that change is coming to climate policy. The decisions made in Paris and the agreement reached mean that the process has started and a direction has been defined, Prof. Macrory argued.

The Paris Agreement does not provide for legally binding emissions reduction targets for individual countries. Consequently, the Agreement will be implemented in a facilitative, non-intrusive, non-punitive manner. Countries contribute to goals in accordance with the principle of common but differentiated responsibilities, while avoiding making a distinction between developed versus non-developed countries and placing undue burdens on countries.

In his presentation, Prof. Macrory drew a clear distinction between the Paris decision (context, further work) and the Paris Agreement (enhance implementation and process). The latter needs to be ratified and is expected to enter into force in 2020. Whether this timetable will be accomplished was questioned by Prof. Macrory, who argued that 55 countries representing at least 55% of the world's greenhouse gas emissions should have ratified the Agreement, while currently no more than 17 countries (mainly small island states) have ratified.

Prof. Macrory told the audience of the EEAC Working Group that in his opinion the Agreement is more detailed than expected. Simultaneously, he made it clear that many important issues still need to be worked out in future meetings, making the Agreement also ambiguous from a legal perspective. This ambiguity is reflected in some of the wording of the Agreement. Article 4.1, for example, includes some quite ambiguous terminology, such as 'as soon as possible' and 'in the second half of the century'.

When the Agreement touches upon the Nationally Determined Contributions (NDCs), a more detailed approach becomes apparent. The Agreement states that each party (i.e. country) must prepare and maintain successive NDCs. These NDCs must represent a progression and should "*reflect its highest possible ambition, reflecting its common but differentiated responsibilities and respective capabilities, in the light of different national circumstances*". The tone of the Agreement clearly shifts towards 'must', making it more binding, Prof. Macrory explained.

The European Union will submit an NDC for the Union as a whole. This means that the EU will agree arrangements with Member States on how to allocate reduction targets to each Member State. This process will be managed through the effort-sharing decision, a process which will – most likely – become quite complicated, although all individual countries have signed up to the Paris Agreement.

The EU's NDC was submitted in March 2015. It calls for a 40% reduction by 2030, which is in line with the Paris Agreement objective of limiting the temperature increase to (well) below 2°C. Of course, an interesting legal aspect is that – depending on terms and form – the Agreement may be binding on Member States under EU law, while the NDCs in the Paris Agreement are as such not legally binding at the national level.

Consequently, the question was raised whether the national NDCs will have any status under national law. Prof. Macrory said this initially would be a question of national law, but given the 'bottom up' nature of the Paris Agreement, national courts might increasingly become involved in ensuring the implementation of NDCs through various forms of legal action. Generally courts find it simpler to deal with procedural requirements (time limits for producing plans, etc.) and more challenging to deal with issues of substance (e.g. the content of the plans).

Prof. Macrory concluded by stating that the overall goals of the Paris Agreement, even if they are not binding under international law as such, may become the benchmark for national courts, as was seen in the Dutch Urgenda decision and its reliance on IPCC reports. He also stressed that enshrining targets in law (as in the UK

Climate Change Act) can have an inherent value, even when such targets are not directly enforceable. Laws can always be changed, but this involves a transparent legislative process and is less easy to do than simple policy commitments. Furthermore, embedding targets in law helps to secure internal government policy support, particularly where there are tensions between departments. Moreover, it creates public resonance in the form of clearly intelligible targets. This might help increase public pressure, Prof. Macrory concluded.

Climate change legislation in Europe: first experiences

Dr Pieter Boot, PBL Netherlands Environmental Assessment Agency

On behalf of the Netherlands Environmental Assessment Agency (*Planbureau voor de Leefomgeving*, PBL), Dr Boot gave a keynote speech on the first experiences gained with climate change laws in Europe. Dr Boot started by explaining that there is a relationship between the 'importance' of climate change policies and other national interests (e.g. industrial and economic development) which determine the relative importance of drivers behind national energy and climate change policies. Furthermore, climate change laws can be defined broadly or more narrowly. Consequently, the number of policy packages which are considered to constitute 'climate change legislation' may differ.

On the basis of his more narrow definition¹, Dr Boot proceeded to identify and describe climate change laws in the UK, Finland, France, Denmark and Norway, and outside the EU in Mexico. Dr Boot explained that the UK is regarded as a role model by many countries. According to observers, the UK's climate change legislation creates added value. The relevant law includes budgets² which are explicitly more ambitious than the EU targets, and also includes clear targets with regard to greenhouse gas emissions, investments, carbon pricing, and research and development. The law does not include legal enforcement mechanisms. Instead, the government is accountable to Parliament to explain its policy decisions. Furthermore, the UK has an independent committee to advise the government.

The Finnish law is inspired by UK climate change legislation, Dr Boot explained. The Finnish law includes a quite ambitious greenhouse gas emissions reduction target (80% reduction) which can be increased if considered necessary on the basis of scientific information. Whereas the UK legislation provides for a four-year policy cycle, the Finnish law stipulates a planning system which consists of a long-term mitigation plan (every ten years), a medium-term plan for non-ETS sectors (every four years) and an adaptation plan (every ten years). Similarities between the Finnish and UK legislation can be found in the monitoring process, the accountability of government to Parliament, and the establishment of an independent advisory committee.

France introduced its climate change law in 2015. The French legislation includes a mandatory greenhouse gas reduction target (2015-18: -20%; 2019-23: -27.8%, 2024-28: -35%) which is in line with EU ambitions. The French law stands out because of its quite detailed approach, including carbon pricing, multi-annual research and development budgets, and a clear roadmap for emissions reduction in industry and buildings (2024), and in buildings and heat and power (2050). An interesting aim of the law is to also promote economic growth (mainly short-term). France does not have a climate change advisory committee like the ones established in Finland and the UK, for instance.

In Denmark, the climate change law aims to realize a 'low-emissions society' by 2050, without specifying precise reduction targets that will help achieve the desired end-state. Nevertheless, every five years the government is obligated to present emissions reduction targets which must have a 10-year horizon and must be aimed at the ultimate goal of achieving a low-emissions society by 2050. As in the UK and Finland, the Danish government also reports annually to Parliament to render an account of how it has fulfilled its obligations. Denmark also has an independent climate change committee embedded in law.

Whereas Norway has relied heavily on purchasing carbon credits to meet the Kyoto targets while facing a 4% rise in greenhouse gas emissions in the 1990-2013 period, a new climate change law is expected to be adopted

¹ A preferably binding national post-2030 target which describes a process for how this target is to be attained, and which includes monitoring and feedback to policy delivery if progress falls short of expectations.

² A carbon budget is a cap on the amount of greenhouse gases emitted in the UK over a five-year period.

by 2017. The draft proposal will most likely be developed based on the UK law, including binding reduction targets for 2030 and 2050, reporting requirements, carbon budgets, and possibly the establishment of an independent advisory body, Dr Boot explained.

When considering the different climate change laws, Dr Boot shared a couple of conclusions with the Working Group audience. According to Dr Boot, existing climate change legislation was broadly supported in parliaments across Europe. It is interesting to consider the fact that no ideological bias in climate change legislation in general could be identified, although left-leaning governments are more likely to pass framework laws (Fankhauser et al., 2014). Furthermore, Dr Boot concluded that legislation is certainly not the only relevant factor in achieving low-carbon ambitions, but it has its added value.

When focusing more specifically on the various national examples, Dr Boot concluded that while the UK Climate Change Act seems a useful example, the different legislative traditions in European countries will require different approaches. Is there a tradition of imposing specific obligations on the government to achieve long-term objectives? How is the independence of the advisory committee ensured, and how much weight is assigned to its advice? These are just some examples of the questions which need to be addressed when comparing countries.

Dr Boot underlined once again that it is important to be aware of differences in the forces driving inclusion of climate change matters in energy policies. As a final remark, Dr Boot argued that after the Paris Agreement it seems worthwhile to aim for broad political support, as this promotes stability in policy implementation in the medium and long term. This is an essential precondition for successful climate change policies.

Discussion

The debate focused on the different approaches, ranging from predominantly top-down like in the UK to predominantly bottom-up like in Germany or Denmark. German policy is aimed at innovation and industry, and also looks at renewable energy sources rather than just curbing CO₂ emissions.

Another interesting topic of discussion concerned the “axis of analysis”. Dr Boot introduced the top-down versus bottom-up dimension and the detailed versus non-detailed dimension. Would it also be useful to consider an axis of pervasiveness versus non-pervasiveness? One could argue that without climate change legislation, the integration and pervasiveness in other sectors could be increased.

The independent committees are present in almost all cases, and they have a very important role. In the UK the committee has an advisory role vis-à-vis the government and Parliament.

Should climate change laws be constitutional laws, or part of another set of laws, e.g. spatial planning legislation? There are also laws focusing on adaptation, and countries sometimes have separate adaptation laws. Other countries may include some adaptation in the climate change legislation itself.

Climate change legislation at the national level: three case studies

Climate change law in France: Sophie Gaudeul, French National Council for Ecological Change

Climate change law in Catalonia: Sílvia Cañellas, Catalan Office for Climate Change

Climate change law in the United Kingdom: Dr Adrian Gault, Committee on Climate Change

France

Ms Gaudeul introduced the seven main aims of the French energy and climate law. Among other things, the law focuses on economic growth, security of supply, reduction of dependence on energy imports, and maintaining a competitive and internationally attractive energy price which keeps consumer energy bills affordable. In addition, the law aims to preserve human health and the environment, guarantee social and territorial cohesion, fight energy poverty, and contribute to the further development of the European Energy Union.

On the basis of these general aims, the French legislation includes a wide range of targets in different policy domains. For example, the law stipulates a 40% reduction in greenhouse gas emissions during the 1990-2030

period, and aims to realize a reduction in final energy consumption of 20% by 2030 and 50% by 2050 (compared to 2012 baseline levels). The law also aims to cut consumption of fossil fuels by 30% by 2030 compared to 2012.

France wishes to increase the share of renewables in gross final energy consumption to 23% by 2020 and to 32% by 2030. One interesting element is the objective of reducing the share of nuclear energy in the French electricity supply from 78% today to 50% by 2025.

With regard to the aims of protecting the environment and combating air pollution, the law calls for stepping up efforts to reduce air pollution by replacing cars, lorries, coaches and buses with low-emission vehicles and by installing 7 million charging points for electric vehicles by 2030.

The law also includes targets for the housing sector. France wants to accelerate the energy renovation of the housing stock by completing 500,000 major renovations per year, with priority assigned to housing subject to “fuel poverty”. In addition, the energy performance of new buildings is to be improved by making sure that all new buildings are constructed in accordance with the applicable standards for low-energy housing by 2050.

As creating a circular economy is part of France’s efforts to achieve its targets, the law stipulates a reduction of municipal waste production per capita by 10% over the 2010-2020 period, while decoupling raw materials consumption and the growth of the French GDP.

France has developed several strategies and programmes as part of its energy and climate law. The National Strategy for Low-Carbon Development (2015-2028) and the Multi-Annual Programme for Energy (2016-2023) are part of the legislation. The National Strategy for Low-Carbon Development (NSLC) covers three successive five-year periods. This strategy imposes greenhouse gas emissions ceilings (carbon budgets) that France must not exceed. Furthermore, future national policies for transport, energy production and spatial and infrastructure planning should also take the strategy into account.

The Multi-Annual Programme for Energy (PPE) defines a number of priorities for supporting various forms of energy and energy savings, in line with the NSLC. These priorities are: energy efficiency and renewable energy, security of supply, and balancing supply and demand. The PPE covers two successive five-year periods.

The French legislation also includes financial incentives and fiscal tools to reach its aims. These include support for the thermal renovation of buildings, new long-term loans for the energy transition and green growth, and support for research and innovation projects and professional training.

Greenhouse gas emissions will be taxed at EUR 22 per tonne of CO₂ in 2016, EUR 30.50 per tonne in 2017, EUR 39 per tonne in 2018, EUR 47.50 per tonne in 2019, EUR 56 per tonne in 2020, and EUR 100 per tonne in 2030. Tax credits for energy-related renovation work (insulation-efficient heating, renewable energy sources) will be simplified and increased to 30% of total expenses, while car owners can receive conversion bonuses for electric vehicles and support for the installation of charging points.

In conclusion, in conclusion, Sophie Gaudeul underlined that climate modeling has suggested that all these efforts could be insufficient to reach the 2°C goal. So it should be probably necessary to complete these actions in the future, perhaps by including measures supported by additional sectors.

Catalonia

Climate change legislation is being introduced not only at the national level but also at the subnational level. The Spanish autonomous region of Catalonia, for example, is about to introduce its own climate change legislation. In January 2016 the Government of Catalonia approved a climate change bill which has now been submitted to Parliament. Catalonia produces 14% of Spain's emissions, is home to 16% of the country's population, and produces 20% of its GDP.

The Catalan climate change bill has been introduced because regional governments are responsible for many aspects of climate policy, especially in non-ETS sectors. The Catalan bill establishes mitigation targets which are in line with EU climate policy, seeks to mainstream climate change in all policy fields, and to ensure policy coherence across sectoral policies. Moreover, the bill should help to foster a low-carbon economy, provide clear incentives to businesses and local governments for mitigation- and adaptation-related actions, and should increase resilience and reduce vulnerability to climate change impacts.

The Catalan climate change bill will meet EU criteria with regard to the period, level of ambition and effort-sharing targets, and therefore includes a greenhouse gas reduction target of -25% by 2020 and -80% by 2050. Furthermore, the Catalan bill contains provisions for the adoption of adaptation strategies, which should include impact assessment and measures to cope with extreme weather events and to ensure the protection of vulnerable ecosystems, economic sectors and territorial areas.

The bill has an extensive chapter detailing how adaptation and mitigation measures will be incorporated into twelve sectoral policies, including policies on agriculture, energy, waste, health, urban planning and housing. In some cases the measures included in this chapter provide incentives for businesses and local governments to adopt mitigation or adaptation actions. In most cases, however, the chapter establishes provisions aimed at governmental departments and planning instruments (for example, irrigation plans should take into account future climate projections concerning water availability).

The Catalan climate bill was developed by means of an inclusive process, ensuring participation of a broad spectrum of stakeholders. The climate bill calls for the creation of new bodies such as a Climate Change Council, which will submit proposals for climate change policies, in the area of mitigation as well as adaptation. In addition, an independent committee will evaluate climate change policy. Monitoring has been arranged through an obligation to issue a report to Parliament every three years.

Like the French national climate change legislation, the Catalan bill also includes financial incentives and fiscal instruments. A new CO₂ emissions tax for cars and vans will be included, which will be additional to the existing local tax for motor vehicles. The amount to be paid will depend on the CO₂ emissions produced. Cars are taxed starting from 121 g CO₂/km, with rates increasing proportional to the volume of emissions. Vans are taxed starting from 140 g CO₂/km. The taxes will be collected by the Government of Catalonia.

The bill also urges the Government of Catalonia to evaluate public subsidies in order to check their adequacy in relation to the climate change bill. In particular, the Government of Catalonia should review the public subsidies and tax refunds for fossil fuels currently in place, within two years following the approval of the climate change bill.

The Advisory Council for the Sustainable Development of Catalonia (a member of the EEAC Network) issued an assessment report in 2014, welcoming the bill as a key step for climate change mitigation and adaptation in Catalonia and suggesting the inclusion of mitigation targets per sector.

In her concluding remarks, Ms Cañellas underlined the cross-sectoral emphasis of the bill, which provides a comprehensive and coherent set of sectoral policies for climate change mitigation and adaptation actions.

As previously indicated, the climate change bill has already been approved by the government and submitted to Parliament, which accepted the text for debate in April 2016. Ms Cañellas informed the EEAC Working Group that the Parliament of Catalonia will start debating the bill in September 2016 at the earliest. In a first response, political parties have called for more ambitious targets and specific measures and for a stronger

emphasis on energy issues. Based on these initial responses, Ms Cañellas concluded that the text of the bill will most likely be amended by Parliament before it comes into force.

United Kingdom

The UK Climate Change Act was passed in 2008 and established a framework for the development of an economically credible emissions reduction path. The Act not only specifies a long-term greenhouse gas emissions reduction target, it also requires the government to set legally binding 'carbon budgets'³ on track to that target, establishes an advisory Climate Change Committee, and requires development of a national action plan to meet the targets.

The Act commits the UK to reducing emissions by at least 80% in 2050 compared to 1990 levels. This target was based on advice from the Committee on Climate Change. The 80% target includes greenhouse gas emissions in the UK as a whole, including the devolved administrations, which currently account for around 20% of total emissions. In a recent (March 2016) statement in Parliament, the government underlined its belief that the UK will need to take steps to enshrine the Paris goal of net zero emissions in UK law. The question is "not whether, but how we do it."

In addition to the long-term emissions reduction target, the framework of carbon budgets is also included in the Act. In making its recommendations on carbon budgets, the Committee on Climate Change assessed abatement options against carbon values projected to reach GBP 78 per tonne of CO₂ in 2030 and GBP 220 per tonne of CO₂ in 2050. These budgets are explicitly more ambitious than the EU targets. At the same time, new policies are needed to meet the requirements of the fourth budget period (2023-2027). The UK Government announced on 30 June 2016 that it has accepted the Committee's recommendation to set the fifth budget at a level requiring emissions of 57% below 1990 levels. The third part of the Act relates to adaptation. Through a national adaptation plan, the Government must assess the risks that climate change poses to the UK, prepare a strategy to address them, and encourage critical organizations to do the same.

The Act is quite clear which institution is in charge and therefore responsible for achieving the aims defined in the Climate Act. The Act spells out that it is the duty of the Secretary of State for Energy and Climate Change to ensure that the net UK carbon account for the year 2050 is at least 80% lower than the 1990 baseline, and to set the level of carbon budgets. However, if the Government wants to set a different level of budget to that recommended by the Committee on Climate Change, it will have to explain to Parliament why it wants to do so. The Act gives the Secretary of State the authority to adjust the target or baseline upward or downward. However, the Secretary of State can only do so in the event of significant changes in EU or international law, or in scientific knowledge about climate change.

The Committee on Climate Change

The fourth element of the Act – the establishment of a climate change committee – was the focus of particular attention during the session of the EEAC Working Group. Dr Gault explained that the Committee was established by the Climate Change Act to provide independent advice to government and Parliament on matters such as emission limits, annual progress and adaptation.

The Committee is a non-departmental public body, with expert members, sponsored by UK ministries (principally the Department of Energy & Climate Change and the Department for Environment, Food & Rural Affairs). It is an institution which highly values its independence. The Committee has its own research budget and is primarily supported by its secretariat, which includes mainly analysts. The Committee aims to ensure proper inclusion of civil society and relevant sector representatives through engagement with stakeholders covering all sectors (for example, over 200 meetings when preparing its advice on the fifth carbon budget).

³ A carbon budget is a cap on the amount of greenhouse gases emitted in the UK over a five-year period.

An important part of the Committee's task is to track progress. As part of this duty, the Committee submits an annual report to Parliament on progress towards meeting the carbon budgets. In providing that advice, the Committee has developed a set of indicators that they report against. The government is required to respond to the advice in the progress report, but is not obliged to follow this advice. Dr Gault argued that hopefully, through this process, the UK would ensure that the legislated carbon budgets are met.

The Committee will provide further advice to the UK Government later in the year (2016) on the implications of the Paris Agreement for UK climate change policy. According to Dr Gault, the Paris Agreement has greater long-term global ambitions than assumed by the current UK targets for 2050. Further advice will consider implications for the UK's 2050 target and the most appropriate target for the UK after 2050 (e.g. when to reach net zero emissions).