

POLIMP Guide towards COP21 in Paris



ENERGY EFFICIENCY IN THE CLIMATE GOALS

Energy efficiency provides a cross-cutting dimension for climate, energy and industrial policies. It is a no-regrets policy that can help the EU to reduce its energy use and overall energy system costs, and to reduce its greenhouse gas (GHG) emissions, while it can be placed in an international cooperation context.

In the context of the EU climate policy, besides reducing GHG emissions, the EU climate and energy strategies have the aim to increase energy security and strengthen the competitiveness of European economies. These targets form part of the headline targets of the EU's Europe 2020 strategy for smart, sustainable and inclusive growth. Within this framework, the EU aims to achieve an energy efficiency target of 20% energy savings by 2020. The European Commission (EC) also sees a crucial role for energy efficiency towards 2030 in its 'Energy Efficiency Communication', and proposes a 30% target. In October 2014, the European Council agreed on a non-binding target of at least 27% for 2030. In 2020 this will be reviewed, with the aim to increase it to a binding target of 30%.

EU ENERGY EFFICIENCY POLICY

The backbone of the EU's energy efficiency policy is formed by the Energy Efficiency Directive (EED, 2012) and the Energy Performance of Buildings Directive (EPBD, 2010). Within the EED, Member States are required to set national energy efficiency targets in an area of their choice (e.g. primary/final energy savings, energy intensity or energy consumption). More transparency of energy consumption for consumers, energy audits for enterprises, and renovation of public buildings are also introduced. In terms of decarbonising the energy system, the Energy Union Strategy (2015) is a project of the EC to coordinate the transformation of the European energy supply, aiming for secure, sustainable, competitive, and affordable energy for every European.

IMPORTANCE OF ENERGY EFFICIENCY

Based on the IEA report *Capturing the Multiple Benefits of Energy Efficiency*, avoided energy use through improved energy efficiency is equal to about 65% of total final energy



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"Energy efficiency can and should play a predominant role for emission reductions"

consumption in IEA countries. Therewith, energy use avoided by IEA countries is larger than the actual energy demand met by any energy resource, such as oil, gas, or coal. While once called the 'fifth fuel', the IEA has now dubbed it the 'first fuel' to emphasise the importance of energy efficiency measures. This is supported by the *Impact Assessment* of the EC, which shows that a 40% energy efficiency increase is expected to achieve a GHG emission reduction of 43.9% by 2030. Based on the assessment, a 40% energy efficiency goal can deliver a 4.5% higher GDP (relative to a business-as-usual scenario) and result in 3% more jobs. In addition, the EU's annual energy import bill can be reduced by more than € 200 billion after 2030. The EC also states that the European economy will be hampered (through limited productivity) should this energy efficiency potential remain untapped.

The role thus of energy efficiency in the EU is significant for the forthcoming climate conference in Paris, COP21. The EU can trigger the international discussions on climate policy beyond emission reduction targets, where energy efficiency can play a predominant role.

READ MORE ON ENERGY EFFICIENCY, INCLUDING TARGETS AND POLICY INSTRUMENTS: CLIMATEPOLICYINFOHUB.EU/ISSUES/ENERGY-EFFICIENCY

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TOWARDS A GLOBAL CARBON MARKET?

Andreas Türk
University of Graz



"The development of a global carbon market will be a concept for the long term"

The Kyoto Protocol (KP) aimed to pave the way for a global carbon market. Developed countries had binding targets, which they could partly achieve through carbon credit trading. The KP follows a top-down approach with commonly agreed objectives and policy instruments, as well as comparable efforts. Since COP15 (Copenhagen) and COP16 (Cancun), however, a bottom-up climate regime has emerged, which focuses on both developed and developing countries, and leaves them with freedom to formulate their intended nationally determined contributions (INDCs) to global emission reductions. This also implies freedom for countries to choose policy instruments. As a result, while emissions trading instruments receive relatively little attention at high-level UN climate negotiations, individual countries and regions have initiated domestic and regional emission trading schemes (ETSs, see Figure 1).



Figure 1. World map of ETSs (existing and scheduled for implementation)

In principle, in a bottom up approach, emerging ETSs could be linked to each other, so that eventually a global carbon market could emerge, just as envisaged by the Kyoto Protocol. However, this requires uniformity of methods for calculating and monitoring of emission reductions achieved. How quickly such uniformity can be achieved critically depends on whether and how a Paris Agreement will contain basic standards for that, and how these will be considered in the design of emerging ETSs and future project-based mechanisms. This process will not be quick and easy, but a development to be completed in the longer run.

AN INTRODUCTION TO EMISSIONS TRADING AND THE EU ETS IS AVAILABLE AT CLIMATEPOLICYINFOHUB.EU/EU-EMISSIONS-TRADING-SYSTEM-INTRODUCTION

INDC BEYOND MITIGATION: TNA AS MODEL



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Preparing for COP21 in Paris, countries present their intended nationally determined contributions (INDCs). The technology needs assessment (TNA) process can be seen as a model for identification of technologies and measures for climate change mitigation and adaptation, in light of countries' development contexts.

Not all INDCs submitted to date are based on an integrated mitigation, adaptation and sustainable development agenda, and the substantiation of targets is not always clear.

The experience with TNAs since 2001 could be considered useful 'testing ground' for INDC formulation. The TNA process aims to simultaneously achieve climate and development goals by selecting mitigation and adaptation technologies with development benefits. Using a TNA as a starting point means that the INDC can be based on a structured, country-driven, and participatory process (as illustrated in Figure 2), with development priorities as starting point, and clear action plans for implementation. Targets in the INDC, as input for the global climate framework, are then based on genuinely nationally appropriate actions.

POLIMP'S 3RD BRIEFING NOTE ELABORATES ON HOW EXPERIENCE WITH TNAs CAN BE CONSIDERED AS A STRUCTURED APPROACH FOR THE DEVELOPMENT OF INDCs: WWW.POLIMP.EU/PUBLICATIONS/BRIEFING-NOTES/ITEM/3RD-BRIEFING-NOTE

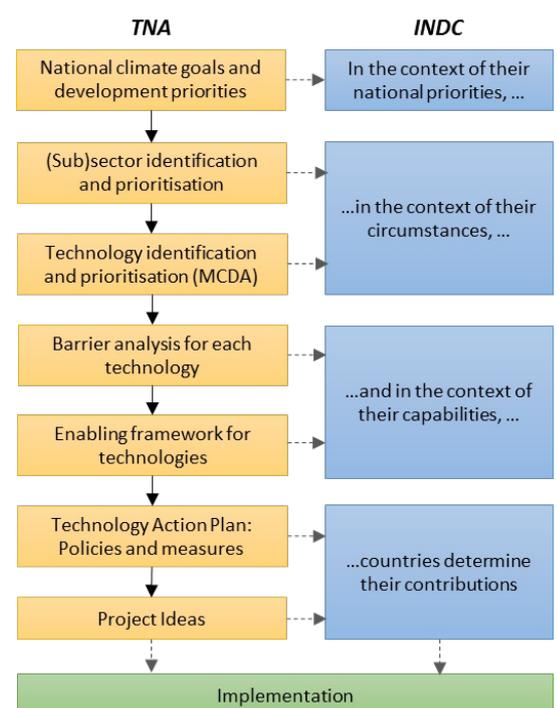


Figure 2. TNAs follow a structured approach based on the TNA Handbook. Each stage of the TNA can contribute to the aspects of the INDC.

PARIS 2015: LESSONS FROM COPENHAGEN

Matthias Duwe
Ecologic Institute



"A Paris Agreement is seen as likely, but it won't deliver on the 2 degrees target"

In the run-up to and follow-up from COP21, a series of eight POLIMP Expert Response Surveys will be engaging a targeted group of stakeholders and experts to deliver insight into the current outlook on the climate negotiations and policy issues.

The first survey, entitled 'Paris 2015: Lessons from the Copenhagen Experience', asked the POLIMP Expert Response Group (ERG) to comment on various aspects of a possible December Paris Agreement and reflect on how circumstances have changed since COP15 in Copenhagen.

The survey also provided input for the first POLIMP Webinar on the same topic, with guest speakers Prof. Dr. Sebastian Oberthür (IES) and Wytze van der Gaast, PhD (JIN Climate and Sustainability).

SEE POLIMP.EU/EVENTS/POLIMP-WEBINAR FOR A RECORDING OF THE WEBINAR. INFORMATION AND REPORTS OF THE POLIMP SURVEY SERIES CAN BE FOUND ON POLIMP.EU/PUBLICATIONS/SURVEY-SERIES

COP15 in Copenhagen was largely seen as a 'failure', but the global context is seen as somewhat better in 2015, most importantly due to advances in technology and progress in national climate policies around the world. A Paris Agreement is viewed as likely, but the experts think it is less likely that mitigation pledges stipulated by the agreement would be legally binding.

The long-term impact of the Paris negotiations is viewed as more significant than its short-term effects. However, there is low optimism that COP21 will deliver on the 2 °C target. Experts from business and government were marginally less optimistic than researchers/NGOs.

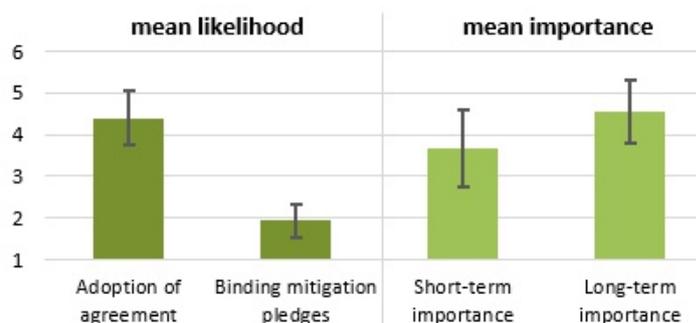


Figure 3. Key findings from the survey, including standard deviations, with 'likelihood' and 'importance' on scales from 1 to 6.

ClimatePolicyInfoHub.eu

CLIMATEPOLICYINFOHUB.EU explores the impacts of EU and international climate policy for decision-makers in policy, business and civil society. Click on the link below for articles on the history of the UN climate negotiations.

HISTORY OF THE CLIMATE NEGOTIATIONS

Policy makers agreed in 1992 on a UN Framework Convention on Climate Change (UNFCCC). Since then, this has been the basis for the negotiations with the Kyoto Protocol (1997), Marrakech Accords (2001) and Cancun Agreements (2010) as major milestones.

Several factors led to uncertainty and complexity as well as scepticism on the likelihood of reaching an effective agreement in the post-Copenhagen process. A more flexible approach is now used, with promising prospects for a more inclusive and effective agreement for COP21.

CLIMATEPOLICYINFOHUB.EU/ISSUES/INTERNATIONAL-CLIMATE-POLICY

KEY PUBLICATIONS

The POLIMP Climate Change Monitor Series provides a structured list of recent publications relevant to the UNFCCC negotiations and EU climate policy.

WWW.POLIMP.EU/PUBLICATIONS/CC-MONITOR

POLIMP Briefing Notes are concise notes on key climate policy issues and their implications. Recent notes were on 'Harmonisation of EU Renewable Energy Policies' and 'Sustainability Criteria for Biomass'.

WWW.POLIMP.EU/PUBLICATIONS/BRIEFING-NOTES

WORKSHOP IN BERLIN

A POLIMP Stakeholder's Workshop will take place in Berlin, Germany, on 15 September 2015, on challenges for low-carbon technology support in Europe - lessons learnt.

WWW.POLIMP.EU/EVENTS

The POLIMP project aims to address gaps in knowledge and to inform policy at various decision-making levels regarding the implications of international climate policies under discussion. This project has received funding from the European Union's Seventh Framework Programme for Research, Technological Development and Demonstration under Grant Agreement No 603847.

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