SUBMISSION BY GREECE AND THE EUROPEAN COMMISSION ON BEHALF OF THE EUROPEAN UNION AND ITS MEMBER STATES

This submission is supported by Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia and Serbia.

Athens, 20 May 2014

Subject: **Ad Hoc Working Group on the Durban Platform for Enhanced Action: Workstream 2 - Enhancing pre-2020 mitigation ambition**

Summary

The EU welcomes the opportunity to submit on pre 2020 mitigation ambition, and would like to emphasise the following key points:

- **Focused discussions on options for increasing pre 2020 mitigation ambition should continue under the Technical Expert Meetings (TEMs)** – including active input from International Organisations and initiatives, as well as local authorities and the private sector.
- The most promising policy options, and initiatives, in terms of their potential for generating globally relevant emissions reductions, should be outlined in the Technical Paper to be prepared by the Secretariat, and identified in a short summary for policy makers before the June ADP Ministerial session.
- **Political leadership through the announcement of actions and support for specific policies and initiatives will be vital** to demonstrating the impact of this workstream.
- **All Parties should come to the June ADP Ministerial ready to discuss policy options and actions that they are willing to take with international partners to raise pre 2020 mitigation ambition**, and to build political momentum ahead of the Leaders' summit. The Annex to this submission provides examples from the EU experience of such policies and actions.

The EU would like the ADP Co-chairs, the UNFCCC Secretariat and the COP Presidency, in its role chairing the ADP Ministerial in June, to accommodate these proposals, which are elaborated below.

Introduction

1. Parties are not yet collectively on an emissions pathway to achieve our shared goal of limiting global temperature increases to below 2°C relative to pre-industrial levels (the ***2°C objective***). According to UNEP, the mitigation gap stands at 8-12GtCO_2e. Current annual emissions are already 14% higher than the median estimate (44 Gt CO2e) of an emission levels in 2020 consistent with a likely chance of meeting the 2°C objective.

2. The IPCC AR5 WGII report, released in March, is unequivocal in its assessment that the impacts of climate change are already being felt, and are only set to increase; posing great risks to natural ecosystems, human health, global food security, and economic development. The science is clear. This IPCC report is an urgent call to action for the international community. The human and economic losses from ongoing extreme weather events clearly demonstrate the kind of devastating impacts we will face if we collectively fail to achieve the objective of limiting global warming to below 2 degrees. The IPCC AR 5 WGIII report has made clear that any delay of action will make meeting the 2 degree objective much more difficult and costly.

3. The agreement to take forward work to enhance pre-2020 global mitigation ambition through Workstream 2 of the Ad Hoc Durban Platform (ADP WS2) is therefore an essential and integral part of our work. Efforts to increase ambition pre-2020 could provide valuable lessons for the design of the 2015 agreement, and will be vital if we are to achieve a deal that is compatible with the 2 degree objective.

4. We reiterate our call to those countries that have not yet pledged to do so; for increased ambition of existing pledges; and for Parties to consider any other actions that could be taken in areas of high mitigation potential. We must also ensure that progress is made on implementation and clarification of existing pledges and that we continue to build transparency in pre 2020 accounting to ensure environmental integrity in the system and to avoid double counting.

5. The EU looks forward to the opportunity through the KP review process to demonstrate the action that we are taking to close the gap. But it is clear that action by KP Parties alone will not achieve our common objective. Parties that have taken a QELRC under the second commitment period account for less than 15 % of global emissions. All Parties to the Convention should be prepared to consider what they can do to increase their own ambition, with developed countries taking the lead, and in line with common but differentiated responsibilities and respective capabilities.

The TEM process

6. We welcome the Warsaw outcome, which called for the highest possible mitigation efforts from all Parties, and agreed to intensify the work plan on mitigation ambition through examination of opportunities with high mitigation potential, including those with adaptation and sustainable development co-benefits, with a view to promoting voluntary cooperation

7. The EU found the Technical Expert Meetings in Bonn in March to be an extremely useful and constructive way of working. The TEMs demonstrated that here is substantial mitigation potential in renewable energy and energy efficiency, that much of this can be realised at low and even negative cost, and that there is considerable scope for cooperative action. They provided an valuable opportunity to share information on experiences, policy options, and barriers, such as high costs of capital and investment risk. The interaction with IGOs, international initiatives, and funding sources was particularly useful, and provides a good basis for Parties to consider how to move forward, individually and in partnership.

8. It is important that the outputs of these sessions are captured in a usable form, aimed at achieving results. The most promising policy options, barriers, and approaches to overcome them - some of which were identified in the Chairs' reflection note -should be captured in the updated technical paper ahead of the June session.

9. The outcomes of the technical process need to feed into political processes if we are to achieve results. We therefore call for the main outputs to be captured in a short "Summary for Policymakers" that can be used to inform and stimulate discussions at the ADP Ministerial dialogue in June. It will also be useful to consider how such outputs of the TEMs can inspire work on the 2015 agreement.

10. Finally, we welcome the briefing provided by the Secretariat on the voluntary cancellation of CERs and note also the Secretariat's proposed initiative to enhance the transparency and publicity of voluntary cancellation of CERs. We agree that avoiding emissions that might otherwise have been allowed through the use of CERs would be of benefit to the climate system. However, in the context of Decision 1/CP.19 paragraph 5(c), we need to ensure that environmental integrity is maintained, double counting/claiming is avoided, and transparency is maintained. It would be useful for these elements to be explored in a technical paper to be prepared by the Secretariat which should also cover, in relation to implementation, implications for existing decisions in relation to publication and confirmation of CER cancellations and impacts on Parties and the UNFCCC budget.

Way forward

11. **There is a key role for the UNFCCC in giving impetus to pre-2020 policies and initiatives that can really make a difference. We need to ensure a results orientated approach.**

12. We hope that Parties will actively engage with experiences and proposals on how to join up efforts, leverage new actions, and get existing initiatives to go further, faster. In particular, the WS2 process can:
    a. Facilitate new partnerships between those interested in taking forward policies, and those with experience and support;
    b. Consider how to scale up existing initiatives and help Parties and initiatives better align with support channels; making best use of existing Convention mechanisms; and
    c. Incentivise countries to take appropriate national mitigation actions, which could be reflected in their post 2020 commitments.

13. To support this, we should explore how to make best use of existing Convention mechanisms such as the Technology Executive Committee, the Climate and Technology Centre and the Green Climate Fund. This could assist us in identifying the most promising initiatives/policies and to consider how these can benefit from capacity building, financial support and technology dissemination services already available. We should consider how the Convention institutions can best work with expert organizations such as IRENA and IEA to this end.

14. We agree with the co-Chairs that the TEMs should not be viewed as one off events but the start of a multi stakeholder initiative to scale up action. The organisation of further TEMs in June should form the core of our work on WS2 and should be informed by lessons learnt in Bonn in March, including: the need for early preparation; the need for early invites and release of information relating to format; and the early involvement of key non Party actors – including IGOs, international initiatives, and the private sector. We appreciate the co-chairs will seek to find time for both exploring new high potential areas as well as for following up on areas previously addressed.

15. We support a continued focus on energy efficiency and renewables in June, and look forward to TEMs on land use and short lived climate pollutants, including HFCs.

Political leadership

16. **Political leadership will be essential for making progress in 2014**. The ADP process can help to galvanise the political will, to initiate new policies, and to scale up front-runner policies and international initiatives. **We encourage all Parties to participate and engage constructively in the ADP Ministerial session in June; taking the opportunity to create political momentum building on discussions at the Abu Dhabi Ascent and ahead of the UN Secretary General's Leaders' Summit in September, and through to Lima.**

17. In June, **Ministers should come prepared to discuss policy options,** to discuss actions that they are willing to take domestically and with partners, and to**give momentum to initiatives** that can make a real impact in closing the gap.

18. The EU looks forward to continuing work with all Parties in this constructive manner. Our contribution to the update of the technical paper is included as an Annex to this submission.

- The Parties' views, knowledge and experiences about barriers to mitigation action are reflected in the WS2 Technical papers (e.g. Updated compilation of information on mitigation benefits of actions, initiatives and options to enhance mitigation ambition - FCCC/TP/2013/8), in the WS2 Technical expert meetings, and in the reports by international organisation and stakeholders (FCPF, UNEP, FAO, IEA, IRENA, UN-REDD, etc.). All these sources indicate that the typical barriers to overcome when aiming to reap the mitigation potential are:

1. Cost-related barriers:

1.1. Markets are not yet a level-playing field between emission-intensive and low-emission options

1.2. Transaction costs are high for consumers to find information on benefits and costs of options

1.3. Incentives for investors and beneficiaries of the investments are split

1.4. Skills to undertake the investments are not yet broadly available

2. Investment-related barriers:

2.1 Technological solutions are available but not yet demonstrated in all specific local contexts

2.2 The locally available financial instruments are not tailored to the investments that would reap the mitigation potential; the returns on investment are uncertain or not easy to bring to markets

2.3 The beneficiaries are credit-constrained

2.4 The costs and benefits of transformational solutions are unknown

3. Policy context-related barriers:

3.1 Mitigation action requires a complex coordination between different agencies or new capacities

3.2 Administrative arrangements for new mitigation projects are heavy or insecure

3.3 There is only recent experience about linking up mitigation

- A broad range of parties, and notably the EU, have been active in developing mitigation policies since the 1990s, seeking to reap the mitigation potential and the significant benefits for sustainable development at stake. These policy responses offer lessons on how to tackle the barriers to mitigation.
- As there is still a significant mitigation potential to reap at global level, and as it is urgent to close the 8 to 12 GtCO2e mitigation ambition gap, we will all benefit from learning more about each other's approach to address the prevailing barriers to mitigation on the ground.
- The EU sees particular opportunities for reducing emissions through energy efficiency, renewables, REDD+, phase down of HFCs and fossil fuel subsidy reform. Mitigating short-lived climate pollutants can also help to reduce the rate of global warming in the near-term. The mitigation potentials and opportunities for taking action in these areas have been outlined in previous submissions.
- This Annex gives some examples of policy experiences from the EU to deliver domestic emission reductions or to enable international cooperation, and how they played a role to lift specific barriers. There are many more examples than those given in the summary section and Parties are encouraged to refer also to the EU's presentations in the Technical Expert Meeting.

- These examples are provided to encourage scaling-up and replication of effective mitigation approaches. Hence, they also suggest some possible venues for further addressing specific barriers faced by all countries and stakeholders. These examples are not a comprehensive presentation of policies in place in the EU; for this, please refer to the EU National Communication to the UNFCCC.
- The EU's efforts to reduce emissions in the EU and in collaboration with partner countries span far beyond the examples mentioned below. The examples cited here are to illustrate that there are many ways to address barriers to mitigation action, and that barriers can be overcome to close the mitigation gap.
- Moreover, this Annex indicates some prospects for enhancing global mitigation action by 2020 through developing and reinforcing international cooperative initiatives.
- Scaling-up multi-stakeholder cooperation on mitigation is a key objective of the UN Secretary General's Climate Leaders' Summit in September 2014, through high potential 'climate action areas' (i.e. renewable energy, energy efficiency, forests, agriculture, transport and short-lived climate pollutants). The EU is keen to cooperate with other Parties in several of these action areas to build momentum in New York on the way to Paris in 2015.
- Parties could also consider the paper "Enhancing ambition through International Cooperative Initiatives", supported by the Nordic Council, which identifies a broader range of international cooperative initiatives that hold significant promise for raising ambition and closing the global emissions gap; from global dialogues and formal multilateral processes which identify and support mitigation activities, to implementation initiatives engaged in direct emissions reduction efforts.

Insights from EU domestic policy experiences, co-benefits realised, and prospects for scaling-up mitigation action from EU approach to overcoming barriers

1. Cost-related barriers:

1.1 MARKETS ARE NOT YET A LEVEL-PLAYING FIELD BETWEEN EMISSION-INTENSIVE AND LOW-EMISSION OPTIONS

Key options for and benefits from addressing this barrier: Some EU member states (such as Sweden) have put in place specific measures like **CO2-based taxation schemes to create a more level-playing field for investment** whilst contributing to decoupling emissions and growth. Similarly, the new **EU legislation on fluorinated gases** will let the market take into account emissions unaddressed so far and this will lead to substantial energy savings and reduce costs through the introduction of new, more efficient equipment.

Prospects for scaling-up the benefits through international collaboration: Opportunities exist for all Parties to exchange their experiences on market-based policies under the World Bank PMR. In the **Climate and Clean Air Coalition initiative** on HFC alternative technologies and standards, government, industries, and stakeholders are enabling the market transformation through cooperative activities that promote the development and deployment of climate-friendly, energy efficient alternatives and technologies, minimizing HFC leaks through responsible management, and encouraging recovery, recycling, reclamation, and eventual destruction of high-GWP HFCs.

1.2 TRANSACTION COSTS ARE HIGH FOR CONSUMERS TO FIND INFORMATION ON BENEFITS AND COSTS OF OPTIONS

Key benefits from addressing this barrier: The implementation of the **EU's Ecodesign and Energy Labelling Directives,** together with member states experience (e.g. in Sweden, Spain, and Ireland[1]) of regulations and advice services to support **energy efficiency**, demonstrate that substantial numbers of businesses, households and public sector organisations can reduce their energy consumption and save money, at the same time such interventions develop the market for energy saving devices.

Prospects for scaling-up the benefits through international collaboration: There are opportunities for all Parties to engage in sharing experiences and developing new measures in relation to: the **UN-SE4All initiative, and particularly the UNEP-Risoe Energy efficiency Hub, CCAC, the Major Economies Action on Energy efficiency of buildings; the IPEEC working group work on advancing exchanges on policy approaches, standards, metrics; and the Covenant of Mayors Initiative.**

1.3 INCENTIVES FOR INVESTORS AND BENEFICIARIES OF THE INVESTMENTS ARE SPLIT

Key options for and benefits from addressing this barrier: EU member states (like Denmark, or Netherlands) are active in efforts to incentivise investment in **energy efficiency** through **innovative tax reimbursement mechanisms for energy utilities; and through investor payback schemes for energy efficient refurbishment of buildings by landlords**. For instance, the Netherlands has developed a new 'Block by Block ' approach: at least three market participants have to work together in a consortium, sharing their knowledge and experience, with municipalities, housing corporations and provinces elaborating joint plan to significantly enhance the energy efficiency of blocks comprising at least 1,500 - to 2,000 homes. The programme has started with fourteen municipalities projects. Institutional investors provide the bulk of the investment, government grants were only provided for the additional costs during the pilot phase.

Similarly, EU member states are working with international organisations to address this barrier in **forestry** at global level: for instance Germany, the Netherlands and UK are working on the piloting of **performance-based payment systems for REDD+ activities** to create a market-based signal encouraging valuing of the CO2 stocks stored in forests, under the Forest Carbon Partnership Facility. The last five years FCPF's main focus has been on support developing countries with readiness activities and preparations for future REDD+ activities and piloting performance-based payment systems. Some of 36 participating countries, like Costa Rica, Mexico or Nepal, have now moved to the stage of piloting performance based REDD+ activities. Among EU Member states, Germany, UK and Italy as well as the EU Commission are supporting now the FCPF Carbon Fund as it builds on the progress made in readiness and is designed to pilot performance-based payments for emission reductions from REDD+ programs. With its so called "REDD Early Movers Program", moreover, Germany created a mechanism piloting performance-based payments under REDD+ in a limited number of regions.

[1] Better Energy Homes scheme (http://www.seai.ie/Grants/Better_energy_homes/)

These efforts have ensured significant emissions reductions and energy savings, and have created new markets and income for investors and beneficiaries.

Prospects for scaling-up the benefits through international collaboration: Parties can share further policy experiences within international initiatives on energy efficiency like the **International Energy Agency programme on Energy efficiency supported by Denmark and the European Commission**, or in the **UN Sustainable Energy for All / UNEP Risoe Energy efficiency hub supported by Denmark**. There are substantial opportunities for scaling up further REDD+ activities through the World Bank's Forest Carbon Partnership Facility and UNDP's Combatting Deforestation innovative PPP.

1.4 SKILLS TO UNDERTAKE THE INVESTMENTS ARE NOT YET BROADLY AVAILABLE

Key options for and benefits from addressing this barrier: **EU member states have invested heavily in activities to improve the key skills needed to ensure substantial reductions from the energy sector**. This has included training and capacity building programmes for eco-driving, building standards and energy audits in Austria (klima:aktiv programme); support for capacity-building and knowledge on geothermal energy provided by Netherlands and Ireland to Indonesia; and training and capacity-building support for wind, solar energy and energy efficient lighting given by Spain and UNEP to Latin American countries (Guatemala, Honduras, Nicaragua). In particular, the Austria klima:aktiv programme is acting at large scale and involving all stakeholders to develop the skills needed for fostering a competitive low carbon economy. It has already trained 1.100 eco-driving trainers all over Austria, integrating eco-driving in the driving license trainings; and developed energy management for companies: with audit tools for specific technologies; benchmarking system for various branches; and trained more than 1000 energy advisers delivering significant energy savings to companies. Similarly, the Regional Gateway for Technology Transfer and Climate Change Action in Latin America and Caribbean (REGATTA project) implemented by UNEP and supported mainly by Spain and other donors is focusing on strengthening the capacity and knowledge of countries and institutions on mitigation and adaptation to climate change, and it is particularly technology-related capacity with: workshops and webinars on wind and solar energy; technical assistance to Guatemala and Honduras in wind power, and solar energy in Nicaragua; and support for the development of the "Regional efficient lighting Strategy for Central America", approved in December 2013, as a contribution to the initiative en.lighten aiming to transform the current global lighting market to an efficient one through the promotion of efficient and high performance technologies (http://www.cambioclimatico-regatta.org)

Such training and capacity-building programmes are creating opportunities for new markets, jobs and income both within the EU and overseas.

Prospects for scaling-up the benefits through international collaboration: EU efforts demonstrate to other parties the potential for collaboration on capacity-building, skills and training work across the energy sector and beyond. **The activities of the UNEP Climate Technology Centre & Network (CTCN) and the EU's capacity-building programmes are key opportunities for other Parties to work together to scale up these benefits.**

2. Investment-related barriers:

2.1 TECHNOLOGICAL SOLUTIONS ARE AVAILABLE BUT NOT YET DEMONSTRATED IN ALL SPECIFIC LOCAL CONTEXTS

Key options for and benefits from addressing this barrier: EU member states and the European Commission, working with international partners such as UNIDO and the UN Sustainable Energy for All Initiative are engaging in **supporting the demonstration of new energy technologies in different local contexts**. For instance, the **Green Technology Accelerator** project **GreenEvo** is enhancing the technology transfer between Poland and developing countries; Poland support for new 'Prosument' initiative is enabling the deployment of small-scale renewable energy installations; and the Austria Climate and energy fund addresses high costs of capital and investment risks by providing financial support for research and development, and promoting market access and deployment of new energy technologies and transport systems, addressing in particular communities and regions. Similarly, technological solutions are tested through the land use management projects to improve forest protection and water irrigation in Ethiopia (supported by Netherlands); the research, innovation and market acceleration measures for renewable energy (supported by Austria). And to address technological barriers to reduce F-gases, the EC is financing two projects coordinated by UNEP: a 3-m€ project to maximise the climate benefits of the MLF-funded HCFC-phase out of under the Montreal Protocol, aiming to reduce the use of high GWP HFCs as replacements for ozone depleting substances, esp. in Africa and the Pacific islands, and a 5-m€ project to address waste treatment of ozone depleting substances and HFCs, with countries in the Asia-Pacific region (Bangladesh, Cambodia, Malaysia, Sri Lanka, Pakistan, Vietnam).

Moreover, the establishment of **regional renewable energy and energy efficiency centres** in sub-Saharan Africa (supported by Austria, Spain); and the Clean Technology Fund administered by the World Bank (supported by Spain and Sweden for instance) are particularly effective at enabling countries to develop and implement national strategies addressing their national development priorities through benefitting from the opportunities created by low emission technologies. Indeed, the Clean Technology Fund has effectively support renewable energy projects across technologies: concentrated solar power, photovoltaic, geothermal power, wind power and small hydro; energy efficiency and co-generation plants; bus rapid transit, public transportation, and energy efficient vehicles; and across regions thanks to the involvement of: Colombia, Egypt, Indonesia, Kazakhstan, Mexico, Morocco, Philippines, South Africa, Thailand, Turkey, Ukraine, Vietnam, Algeria, Egypt, Jordan, Morocco and Tunisia. Each CTF national investment plan is tailored by the country to be integrated into national development objectives. More than 100 projects have emerged from these plans. Similarly, Austria and Spain have channelled support to UNIDO for setting up the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE, www.ecreee.org), in Praia, Cabo Verde, to create favourable framework conditions for renewable energy and energy efficiency markets in the 15 member states of the Economic Community of West African States (ECOWAS). In 2012 the ECOWAS Energy Ministers adopted regional policies on Renewable Energy and Energy Efficiency, the ECOWAS Small Hydro Power Program and the ECOWAS Bioenergy strategy Framework. ECREEE is now the focal point to the SE4ALL Initiative. Two new centres are now created to replicate the success of the ECREEE model one with the East African Community (EAC), to serve partner States, Burundi, Kenya, Rwanda, Tanzania and Uganda; and the other with the 15 Members

States of the Southern Africa Development Community (SADC). Recently, UNIDO was requested by the Sustainable Energy Island Initiative (SIDS DOCK) to assist the island nations in the Caribbean and Pacific in the creation of similar centres.

Substantial benefits have flowed from these projects in terms of new investments, innovation, new market conditions and job creation.

Prospects for scaling-up the benefits through international collaboration: The EU experience of working with other Parties and with our partners in the World Bank, UNIDO, International Energy Agency, International Renewable Energy Agency, Climate Technology Centre & Network, the REEP Initiative and through the UN Sustainable Energy for All initiative, demonstrates the massive potential for further scale-up of low carbon technology transfer and establishment of new markets and job creation opportunities globally for all Parties.

2.2 THE LOCALLY AVAILABLE FINANCIAL INSTRUMENTS ARE NOT TAILORED TO THE INVESTMENTS THAT WOULD REAP THE MITIGATION POTENTIAL; THE RETURN ON INVESTMENT ARE UNCERTAIN OR NOT EASY TO BRING TO MARKETS

Key options for and benefits from addressing this barrier: EU member states have been very active in creating new financial instruments to stimulate low carbon investment both domestically and in partner countries. Experiences include new measures to deter deforestation and to enhance management and value-added of forestry (e.g. France, Hungary); a guaranteed floor prices to allow developers to access finance for renewables (Ireland); leveraging of private sector investment in energy efficiency (UK Green Investment Bank); support for renewable energy feed in tariff in Uganda (through the Get Fit programme supported by UK, Germany, Norway); support for household-centred or community-based NAMA actions with partner countries (Austria NAMA Initiative); and unlocking private sector and pension fund finance for developing economies (UK CP3). These projects have ensured the creation of viable new markets for low carbon technologies both within the EU and overseas, and have created the conditions for sustained private sector investment.

Prospects for scaling-up the benefits through international collaboration: EU climate finance, the Green Climate Fund capitalisation and the World Bank all create innovative market mechanisms to unlock climate finance and give investor certainty in low carbon technology investments. Further elaboration of these mechanisms will enhance opportunities for collaboration and scale-up of financial instruments for all Parties. **REEEP, with support by EU and its Member States, is also in the process of launching new call for projects offering new opportunities to address the high costs of capital and investment in the field of renewable energy and energy efficiency, and to scale up clean energy business models in developing countries and emerging markets**. (www.reeep.org). The UK and others have also launched the Global Innovation Lab for Climate Finance, which will hold its inaugural on June 3rd and is aimed at scaling up private climate finance for mitigation opportunities.

2.3 THE BENEFICIARIES ARE CREDIT-CONSTRAINED

Key options for and benefits from addressing this barrier: The EU and its Member States' experiences demonstrate an inclusive approach to the deployment of low carbon energy solutions. Measures such as grant assistance for insulation and heating system upgrades for energy -poor households, the creation of new long-term loan repayment mechanisms for households and businesses have created substantial energy and cost savings and created thousands of new jobs within EU member states. International cooperation programmes working with the World Bank's Climate Investment Funds are creating renewable energy investment plans for industry and business that are removing barriers to investment and increasing investor confidence in some of the world's poorest countries. Key benefits of these interventions include new economic growth opportunities, cost savings for households and industry; and the deployment of new technologies. For instance, in Ireland, the Better Energy Programme has been providing grant assistance to homeowners and communities towards the cost of insulation and heating system upgrades, and free home energy upgrades to energy poor households through a network of community based organisations, and by September 2013, 250,000 homes had been upgraded (out of a total building stock of 1.6m homes), with free home energy upgrades for 100,000 households experiencing energy poverty, creating around 3,800 full time jobs (http://www.seai.ie/Grants). Similarly, Greece Program 'Energy Efficiency at Household Buildings' has offered citizens who meet specific income-related criteria interest-free loans to carry out major interventions for improving their houses' energy efficiency, aiming to save up to 1 billion kWh annually. This programme already created more than 3000 new jobs annually, and small-medium enterprises develop new construction and engineering skills.

Prospects for scaling-up the benefits through international collaboration: EU efforts show to all Parties the real prospects to support poorer households, communities and economies, and the benefits of action to collaborate and scale-up these efforts in future, especially through key institutions such as the **World Bank Climate Investment Funds, Africa-EU Energy Partnership, the IRENA Clean Energy Corridors, and the UN Sustainable Energy for All initiative.**

2.4 THE COSTS AND BENEFITS OF TRANSFORMATIONAL SOLUTIONS ARE UNKNOWN

Key options for and benefits from addressing this barrier: Policy experiences in EU member states show clearly that substantial transformation of energy systems is possible via low carbon investment, demand reduction, and indeed full energy self-sufficiency in the case of particular communities and islands (El Hierro, Spain which has 100% renewable energy). These experiences are being replicated now in EU support to accelerate renewable energy investment in Africa through the Africa-EU Energy Partnership which will substantially increase access to modern and sustainable energy services across the continent by 2020 (http://www.africa-eu-renewables.org/). These investments demonstrate real cost reduction, new technology innovation, job creation and enhanced energy security benefits. Moreover, the German Federal Minister for the Environment Peter Altmaier hosted meetings of an "International Renewables Club" in Berlin on World Environment Day, 1 June 2013, with partner Ministers from UK, France, Morocco, South Africa, Denmark, Tonga, China, India and UAE, representing around 45% of investment worldwide in renewables. Although each country has its own energy policy, with different mixed of fossil, nuclear and others, this

group is a powerful forum to highlight success stories of ambitious transformational policies to the investors and policy-makers.

Prospects for scaling-up the benefits through international collaboration: The substantial cost reductions in key technologies such as solar PV and onshore wind demonstrate the further potential for cost savings and reduced fuel import bills for all Parties as the global market for renewables expands. **Key opportunities for all Parties for scale-up of collaboration include the IRENA Renewable energy assessments and Clean Energy corridor proposal**. High-level declarations of interest (SIDS, Africa) indicate the potential for advancing these transformational energy strategies.

3. POLICY CONTEXT-RELATED BARRIERS:

3.1 MITIGATION ACTION REQUIRES A COMPLEX COORDINATION BETWEEN DIFFERENT AGENCIES OR NEW CAPACITIES

Key benefits from addressing this barrier: Experience from the EU and its member states demonstrate the benefits of an integrated approach to climate policy. The overarching EU climate and energy package for 2020 and the proposal for a 2030 climate and energy framework integrates a range of economy-wide market mechanisms and regulatory instruments to improve investor certainty. Many EU member states now have integrated approaches across their Ministries to addressing climate change across their economies (see for instance UK experience with the Carbon Budget implementing the UK Energy Bill ambitious decarbonisation target to cut domestic emissions by a minimum of 80% by 2050 by securing at least 34% emission reductions by 2020; France experience with the national climate plan requiring the local authorities to develop regional climate action plans fully consistent with regional development plans and national climate objectives; or Portugal experience to define an national energy efficiency strategy articulating actions in all sectors with all responsible agencies). EU collaboration with partner countries also confirm the value of integrated approaches, as engaging all public authorities: for instance the Netherlands support to a REDD+ programme in Colombia mobilize all relevant authorities on aiming for better and more rational land use, by improving access to land ownership in particular for the small and landless farmers and reinforcing capacities for animal husbandry so that the pressure on natural forest areas and parks diminishes.

Moreover, in the land sector, it is possible to reap significant benefits for mitigation, whilst delivering overarching food security goals, with a strong governance system, a long term vision and clear principles to guide land management in a sustainable way, and clear land tenure rights. In the EU, the Common Agriculture policy enables the coordination between different administrations, ministries, agencies under shared policy priorities. Similarly, the Austrian forest policy, based on the "Forest act" provides a strong and stable legal basis, with clearly defined ecological, economic and social functions, based on the principle of sustainability, and this has enabled broad discussions process to balance the various interests of all stakeholders on forests and has supported new policies and measures to maintain or increase forest carbon stocks with sustained mitigation benefits. This approach is also currently taken up with success in Georgia, with the Georgian Forest Vision developed with Austria support, also closely integrating all objectives of forest management, with all stakeholders.

Prospects for scaling-up the benefits through international collaboration: Global efforts supported by the EU and other partners to develop low-emission strategies (like UNDP Low-Emission Capacity Building Programme), and the potential for agreement of new post-2015 sustainable development goals for key areas such as energy, water, and agriculture offer opportunities to create new integrated frameworks for scaling-up global emissions reduction efforts. **Joining network of cities, like the Covenant of Mayors Initiative, is another way to build further on the integration of efforts at local and national level to deliver enhanced mitigation benefits.**

3.2 ADMINISTRATIVE ARRANGEMENTS FOR NEW MITIGATION PROJECTS ARE HEAVY OR INSECURE

Key benefits from addressing this barrier: The EU's pioneering experience in developing emissions reduction efforts has given a long time period for learning and refinement of policy approaches to ensure maximum effectiveness. This experience clearly indicates the streamlining and simplification of administrative procedures is key for deployment of new mitigation technologies (in Greece the "PVs on Rooftops programme" particularly addressed this barriers). The early announcement of new regulations for mitigation, like building energy efficiency codes in Denmark and Sweden, is clearly a success factor to give industry time to react and to lower the costs of mitigation.

Prospects for scaling-up the benefits through international collaboration: There are substantial opportunities for greater government-to-government collaboration and exchange of experience on preparing and developing national climate mitigation strategies. Sharing of national expertise and collaborative training programmes can build capacity as needed for developing policy, regulatory and market frameworks (see EU Capacity building submission for such opportunities).

3.3 THERE IS ONLY RECENT EXPERIENCE ABOUT LINKING UP MITIGATION ACTION WITH OTHER POLICY PRIORITIES

Key benefits from addressing this barrier: The benefits of linking up climate mitigation with other policy priorities are clear. For instance, under Ireland's policy for international development, support has been mobilised for investments in renewable energy projects with benefits for health, as PV technologies were used to secure the refrigeration of medicines in health centres. The support by the Netherlands to the Global Research Alliance on Agricultural Greenhouse Gases is delivering new knowledge on how to develop climate-resilient food systems.

Prospects for scaling-up the benefits through international collaboration: EU development cooperation instruments provide strong opportunities to support partners in linking mitigation action with other priorities in formulation of their climate policies (see EU Agenda for Change integrating energy, agriculture development priorities). Key UN-facilitated initiatives for scaling up these wider links include the UNSG Special Representative on Food Security & Nutrition / World Bank initiative on Changing Climates, Agriculture and Food Systems; the UNFPA Demographic Explorer for Climate Adaptation; Climate Resilient Cities (UNISDG / UN-Habitat); the Worldwide Initiative for Safe Schools and Health Facilities (UNISDR).