

**SPECIAL STUDY**

# **The EBRD's experience with policy dialogue in Ukraine**

## **Case study – energy efficiency**

April 2014

EBRD EVALUATION DEPARTMENT



**European Bank**  
for Reconstruction and Development



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Cover photo: Gnatkov Solar energy Plant

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## Abbreviations

CSO	civil society organisations
CTF	Clean Technology Fund
E2C2	Energy Efficiency and Climate Change
E5P	The Eastern Europe Energy Efficiency and Environmental Partnership
E-RES	electricity and renewable energy supply
EBRD	European Bank for Reconstruction & Development
EC	European Commission
EE	energy efficiency
EIB	European Investment Bank
EPC	Energy Performance Certificates
ERU	Emission Reduction Units
ESCO	Energy Service Company
EU	European Union
FI	Financial Institutions team
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	greenhouse gases
IFC	International Finance Corporation
IFI	international financial institutions
KfW	Kreditanstalt für Wiederaufbau
MT	Million Tonnes
MTOE	Million Tonnes of Oil Equivalent
NEFCO	The Nordic Environment Finance Corporation
NERC	National Energy Regulatory Commission
NIF	Neighbourhood Investment Facility
OECD	The Organisation for Economic Co-operation and Development
PETER	Preparedness for Emissions Trading in the EBRD Region
PPP	public private partnership
REN	Renewable energy
SEI	Sustainable Energy Initiative
SME	Small and Medium Enterprises
TC	Technical Cooperation
TOE	Tonnes of Oil Equivalent
MACC	Marginal Abatement Cost Curve
SEIA	State Environmental Investment Agency
SIDA	Swedish International Development Agency
UNDP	United Nations Development Programme
UKEEP	Ukraine Energy Efficiency Programme
UNFCCC	United Nations Framework Convention on Climate Change
UREDLF	Ukraine Renewable Energy Direct Lending Facility
USAID	US Agency for International Development
USELF	Ukraine Sustainable Energy Lending Facility

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## Defined terms

EBRD E2C2 team	<a href="#">Energy efficiency and climate change</a> team supporting banking sector teams
Energy use	<p>Energy use refers to use of primary energy before transformation to other end-use fuels</p> <p>Energy use is equal to indigenous production plus imports and stock changes, minus exports and fuels supplied to ships and aircraft engaged in international energy efficient transport.</p>
Energy production	Refers to forms of primary energy--petroleum (crude oil, natural gas liquids, and oil from nonconventional sources), natural gas, solid fuels (coal, lignite, and other derived fuels), and combustible renewables and waste--and primary electricity, all converted into oil equivalents.
EBRD Legal Transition Team	The <a href="#">Legal Transition Programme</a> is the EBRD's initiative to contribute to the improvement of the investment climate in the Bank's countries of operations by helping create an investor-friendly, transparent and predictable legal environment. The programme's activities focus on the development of legal rules and the establishment of the legal institutions and culture on which a vibrant market oriented economy depends.
UDERLF	UDERLF is the old name of existing USELF programme ( <a href="#">Ukraine Sustainable Energy Lending Facility</a> )
Preparedness for Emissions Trading in the EBRD Region (PETER)	<p>The PETER (TC approved in 2011) project aims to help the governments of Ukraine and Kazakhstan to:</p> <ul style="list-style-type: none"><li>– Understand the costs and benefits of domestic cap-and-trade regimes, compared to other instruments of climate mitigation policies</li><li>– Analyse cap-and-trade options, and criteria needed to link any domestic emissions trading scheme (ETS) with other emissions trading schemes, such as the EU ETS</li><li>– Identify potential road maps towards:<ul style="list-style-type: none"><li>o implementation of a domestic cap-and-trade scheme</li><li>o linking with external cap-and-trade schemes</li></ul></li><li>– Increase preparedness and provide practical tools to create a platform for possible discussions with external partners on linking carbon markets.</li></ul>
purchasing power parity gross domestic product (PPP GDP)	PPP GDP is gross domestic product converted to current international dollars using purchasing power parity rates and an international dollar has the same purchasing power over GDP as a U.S. dollar has in the United States.
TPES	Primary energy supply including indigenous production and imports, minus exports and transfers between energy commodities
USELF	The <a href="#">Ukraine Sustainable Energy Lending Facility</a> (USELF) approved in 2009 accelerated the development of the renewable energy sector in Ukraine, through an innovative combination of EBRD commercial financing, dedicated technical assistance support, and concessional grant co-financing (climate finance) - <a href="#">USELF website</a> .

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## Executive summary

In 2013 the Evaluation department (EvD), at the request of Board members and the President, conducted a study of the European Bank for Reconstruction and Development's (EBRD's) experience with policy dialogue in Ukraine. An early decision was taken to adopt a case study approach as the core evaluation methodology for the needed "rich picture" of qualitative information. Early consultations with EBRD policy actors identified ten possible cases of which five were selected using criteria to ensure their relevance to the Ukrainian context and other countries in which the EBRD invests. Some of these criteria included whether there was an international dimension beyond the interests of the EBRD and Ukraine, volume of operations, and degree of outcome success so far. The area of energy efficiency reforms emerged from this selection process as a key topic for a case study. This case study was prepared by the Evaluation team and then shared with the EBRD Energy Efficiency and Climate Change (E2C2) team, Banking and non-Banking departments for verification and additional input.

This case presents a successful example of policy dialogue – some of the reasons for its success are common to other cases considered by the main study, while other reasons are unique. Unlike most other areas, Ukrainian authorities are generally pro-reform in the area of energy efficiency and renewable energy. As new areas to the country, they did not suffer from any legacy issues, nor, initially at least, did they suffer from anti-competitive behaviour and integrity concerns that continue to be endemic in the more well-established sectors. Nevertheless oligarchs have been quick to recognise new opportunities to establish hegemony within the renewable energy sector in particular, something the EBRD should perhaps have been more alert to.

The presence of favourable conditions for reform means the Ukrainian government is keen to collaborate with international partners, including the EBRD, on legal, regulatory and institutional changes to obtain finance to address the massive challenges posed by energy inefficiency, greenhouse gas emissions and high reliance on imported fuel.

There is also a global and regional dimension to policy dialogue in this area through Ukraine's participation in various international organisations, accords and fora, which helps ensure that the issues remain on the country's policy agenda and, notwithstanding recent events, its desire to reduce its energy dependence on Russia. Also part of the regional dimension is Ukraine's membership of the [European Energy Community](#) and need to comply with its directives.

The EBRD has the capacity to mobilise a substantial amount of investment to support energy efficiency and renewable energy provided the legislative and regulatory environment is right. This "carrot" of grant and investment funds is an important factor that likely increases the EBRD's influence as a policy actor.

Uniquely within Banking in the EBRD, the E2C2 team has its own policy, technical and finance experts. Whereas most of the policy dialogue in the other case studies is carried out by bankers (with or without support from other departments and offices in the Bank – most commonly, Office of the Chief Economist and/or Legal Transition Team), the E2C2 team plays the lead role in policy dialogue in energy efficiency and renewable energy, with support provided by the bankers and consultants. While this study is not an evaluation of the E2C2 team, it is likely that this large multi-disciplinary internal resource dedicated to the energy efficiency, renewable energy and climate change is an important factor influencing success of the policy dialogue in these areas.

The E2C2 team based in the Headquarters of the EBRD has a counterpart in the Kiev Resident Office. This is headed by a very experienced and well-regarded Ukrainian senior manager whose ability to focus on a clearly defined area is clearly also a very important determinant of success.

To date there has not been any constraint imposed by the availability of technical cooperation (TC) and grant funding for E2C2 work. However, the short to medium-term duration of a TC project compared to the

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long-term needs for policy dialogue (including support to policy implementation) does pose problems caused by the lack of predictability of future TC funds. This is particularly an issue where TC funds have been used to substitute for regular staff – the uncertainty of continued funding creates difficulties for longer-term planning and for the staff concerned.

There are some areas that require improvement and refining. While there is good publicity of the EBRD's operations in the sphere there is a need to fine-tune the messages and target different audiences with the customised messages, for example civil society organisations (CSOs), in order to increase the demonstration effect of operations and to show empathy to the efforts of Ukrainian counterparts.

Some improvements are also required in managing the consultants. The consultants are doing a great job in building capacity of Ukrainian regulatory bodies but sometimes too easily succumb to the demands of the beneficiary to change scope of work without comprehending the real drivers of these changes or analysing their long-term consequences. The case of green tariff legislation is a good example. Consultants' efforts, while being generally positive, led to significant changes in the policy context and market configuration. These changes now preclude the EBRD and other international financial institutions (IFIs) from working on large-scale projects due to integrity issues. To provide the needed type of supervision, staff members need to possess or be able to access skills in the area of political economy.

## Findings

The success to date of policy dialogue in the E2C2 sphere is due to a good combination of skills, knowledge of local context, availability of resources for stand-alone TC projects, embedded TC and grants in large and small-scale investment projects, and strong coordination mechanisms established with other IFIs and donors working in the country.

### *The benefits of a well-resourced structure for policy dialogue*

One of the keys to the EBRD's policy dialogue success in the energy efficiency sector is the existence of a dedicated and well-resourced structure for carrying out policy dialogue and implementing TC projects – namely the E2C2 teams at Headquarters and the Resident Office. Successful TC initiatives with strong results can lead to more funding for further initiatives. Donor coordination is strong, rooted in the global nature of the challenges and availability of various international legal frameworks and financial facilities.

The creation of the dedicated structure of the E2C2 team within the Bank was possible due to the high global profile of the issues being addressed. The EBRD continues to need to be seen as responding in a substantial way to climate change challenges. Notwithstanding the particular circumstances leading to its creation, the team's internal policy dialogue expertise does provide a model that other teams might wish to consider as the importance of policy dialogue and its recognition within the Bank grow.

### *Appointment of policy specialists*

The power of policy to create enabling conditions for investment meant that a successful business case was formulated for appointing two policy specialists to the team. The team has both technical and policy skills that provide for a significant degree of self-sufficiency in terms of required policy expertise although consultants are also used to doing the detailed work that requires constant engagement with the client.

There is a potential for conflict of interest with embedded policy specialists although this is less likely to occur as the E2C2 team does not have banking responsibilities.

### *Requirements for additional skills and knowledge*

The EBRD has good skills and instruments for operating in an imperfect and fluid institutional and legal environment like Ukraine's E2C2/renewable energy sphere. However, it would benefit from additional skills and knowledge focused on understanding, pre-empting and neutralising the hidden agendas and vested interests which are wide-spread and causing distortions to otherwise highly competitive and attractive markets. This requires political economy skills, stock-taking of past experience, including in

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other countries of operations with similar context, continual scanning of the context and forecasting the developments in the area.

#### *Prioritisation and agreed strategic framework*

The EBRD is playing a positive role in achieving results in specific sectors; however, more efforts are needed for agreeing priorities and for helping the Ukrainian government in creating a clearly-prioritised and widely agreed strategic framework in energy efficiency encompassing all sectors of economic and human activities.

#### *Cross departmental teamwork*

Coordination with banking and the Legal Transition Team works well, that with OCE somewhat less so.

#### *Educational campaigns*

Whilst the impact of legal and regulatory changes, enhanced capacity and invested funds is significant, major educational campaigns are needed to target the wider population for achieving energy saving measures beyond those being introduced by businesses and public sector. This is not a task for a single IFI, but for a wide coalition of IFIs and donors.

#### *Inclusive legal drafting*

An inclusive approach to legal drafting gained EBRD trust and support from government beneficiaries and other IFIs/donors whose approach is different with sometimes mixed results.

#### *General opportunities for improvement*

There are some general opportunities for improvement, especially to:

- Ensure that consultants are not captured by the client;
- Engage more extensively in advocacy;
- Have more interaction and engagement with community service organisations and pressure groups;
- Communicate the EBRD's achievements more assertively;
- Demonstrate more empathy towards Ukrainian counterparts and understanding of the challenges they face;
- Strengthen review, monitoring, reporting and evaluation which can produce significant gains.

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## The policy problems, results chain and timetable of events

### Policy challenges 2009 to the present

Ukraine is suffering from very high energy intensity (three times greater than the European Union average), and dated technology and equipment. Use of energy resources in the process of extracting, transporting, and utilising them is inefficient and a significant amount of energy is wasted due to the low quality of public and residential buildings and dilapidated distribution networks. Ukraine has a high dependence on imported fuels (up to 80 per cent in peak season).

Institutional and governance arrangements in Ukraine for E2C2 and renewable energy matters are often inefficient and overcomplicated, with many government agencies with conflicting and overlapping functions, exacerbated by a lack of well-functioning coordination mechanisms.

Ukraine has international commitments in the E2C2 sphere that need to be met within a specific timeframe, including greenhouse gas emission rates, energy intensity levels and share of renewables in total energy production.

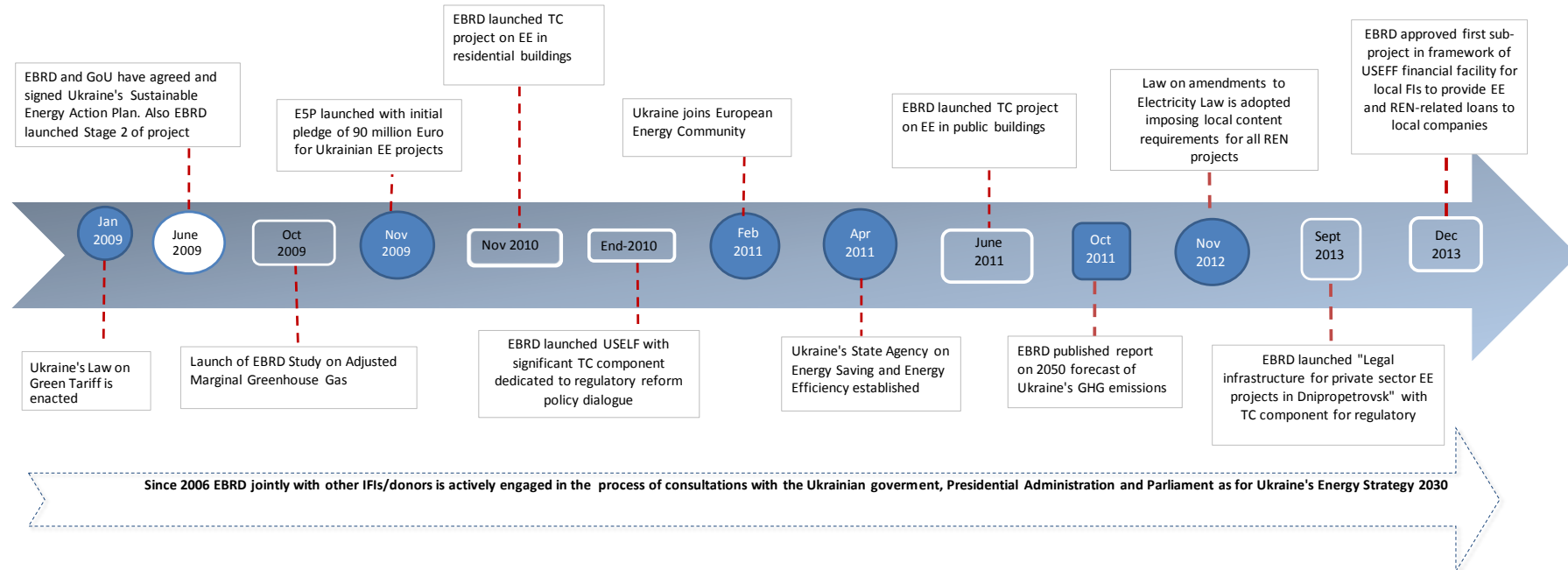
The legal and regulatory environment is imperfect and very volatile – with frequent changes and weak implementation and adherence to standards, insufficient enforcement tools, strong and undesirable influence of economically powerful and self-interested parties seeking to capture or subvert reforms.

There is widespread inefficient use of available financial resources due to high fuel prices combined with across-the-board energy subsidies and procurement procedures that are inefficient, non-transparent and open-to-corruption. Dilapidated capital assets in the public and private sector need upgrading, although there is a lack of financing to do this.

Capacity is low at all tiers and sectors of the economy for introduction of energy management strategies and action plans, with a deficit of qualified energy managers.

Finally, there are challenges related to the culture of energy consumption among the population with wide-spread overuse and waste.

## Summary timeline



## What happened

Conception, planning and strategy		
<b>Deciding to engage</b>	<p>The decision to engage in the E2C2/renewable energy sphere is driven by the Bank's mandate and its commitment to the global objectives of preventing and mitigating the negative consequences of climate change.</p> <p>The launch of the EBRD's Sustainable Energy Initiative in 2006 meant intensified engagement at the policy level with the governments in the EBRD's countries of operations, including Ukraine. Ukraine being one of the least energy efficient economies in the world, and one of the biggest emitters of greenhouse gas, requires support and finance to implement complex reforms necessary to produce the targeted improvements.</p> <p>The signing of a Sustainable Energy Action Plan in 2009 illustrated the government's commitment to engage with the EBRD in policy dialogue in this area and its desire to change legal/regulatory/ institutional frameworks for building a more competitive and sustainable economic model.</p> <p>In addition to the mandate-related rationale for engagement, this case especially has a market opening or business development rationale since energy efficiency and renewable energy were totally new areas for the country and there was no enabling legislation or regulation under which projects could proceed. Policy dialogue and TC projects had to support reforms to open opportunities for transactions in the future.</p>	<p>👉👉<sup>1</sup> (clarity about why engaging)</p>
<b>Identifying the problems</b>	<p>The EBRD is one of the most active IFIs in E2C2 and renewable energy sphere and a significant member of the global architecture of institutions, accords and commitments. It is using global discourse as the basis for identifying specific national level challenges that are relevant to Ukraine, a country in which it has long experience.</p> <p>One of the most significant country-specific challenges is Ukraine's fragmented and poorly coordinated institutional framework for E2C2 and renewable energy.</p> <p>The main areas of engagement were well documented in the Sustainable Energy Action Plan – namely a review of green tariff methodology and legislation, foundations for carbon market functioning in Ukraine, the introduction of legal frameworks for renewable energy development and energy efficiency in residential and public buildings.</p> <p>Perhaps insufficient attention was given to the political economy dimensions in the analysis of underlying causes of problems.</p>	<p>👉👉 (existence of a robust analytical underpinning with a clear understanding of the underlying problems)</p>
<b>Selecting and validating the policy messages</b>	<p>Since energy efficiency is being dealt with on a global scale as part of the response to climate change, the general policy messages have been developed and refined at an international level.</p> <p>However, it is important to understand the country context to ensure the policy prescriptions or messages take account of the local political, social and institutional context. The customisation of messages to local conditions is generally effective in this case due to an on-the-ground policy team that allows the EBRD to be fully integrated into the local policy and institutional contexts, and to effectively communicate its ideas and develop workable actions jointly with Ukrainian counterparts.</p> <p>The EBRD's flexibility, ability to listen and willingness to integrate new developments into the strategy of engagement were given high marks by many stakeholders.</p> <p>The one area the evaluation would point to that could be improved is to more fully take the political economy dimension more into account to reduce the chances of capture or subversion of reforms.</p>	<p>👉 (the messages need to be technically and contextually valid as well as politically aware)</p>
<b>Clarity on results</b>	<p>In the E2C2 and renewable energy sphere final goals are very clear and are often enshrined in international accords and commitments (reducing energy</p>	<p>👉👉 (expected)</p>

1 The various elements of the policy process as reflected in the each case study are characterised as follows:






👉 = not or only weakly demonstrated

👉👉 = mixed performance

👉👉👉 = possible good practice

👉👉👉👉 = possible best practice

The word "possible" is used as practice should be guided by the context so the practices should not automatically be considered good and replicated without thinking about the context.

	<p>intensity, fuel consumption, reducing emissions). That is why initiatives and activities are mostly formulated so that their final outcomes contribute to reaching these targets.</p> <p>The specific results of policy dialogue are also clear and agreed by all parties – usually concentrating on outputs such as pieces of legislation, regulations, institutional reforms leading to enabling effective E2C2 and renewable energy policy development and implementation.</p> <p>However, at the country level, the evaluation sees merit in having a results framework in place for policy dialogue that incorporates a theory of change identifying a hierarchy of outputs, outcomes and impacts that would plausibly flow from inputs provided and actions taken, and which would plausibly address the underlying problems and their causes.</p> <p>More attention could be paid to questioning implicit assumptions and identifying risks, particularly political economy risks, and pre-planning mitigation measures for risks should they occur.</p>	<p>results are clearly spelled out in terms of outputs, outcomes and impacts based on a theory of change plausibly able to address underlying problems and their causes)</p>
<b>Strategy and tactics</b>	<p>Unlike in some other sectors, the government does have genuine interest in reforming the E2C2 and renewable energy sphere so perhaps the EBRD's strategy can be more direct and less multi-strand than other areas where a pro-reform context does not exist.</p> <p>However, as these are new areas for government, business and the population at large, the EBRD needs to play a strong advocacy role and in so doing, engage with many policy actors.</p> <p>Also, as illustrated in this case, oligarchs and other interest groups will always be alert to opportunities to hijack or co-opt the agenda to serve their own ends by effectively lobbying the government to introduce anti-competitive and unfair business practices.</p> <p>In a context such as Ukraine, even where the government is genuinely pro-reform, strategy and tactics must take account of the high potential that powerful economic players will seek to subvert, co-opt or lobby for a reversal of the gains made. Therefore, even in a pro-reform context it is essential to understanding the political economy and to try and pre-empt negative moves by others that would derail the reform process.</p>	<p> </p> <p>(strategy and tactics must take account the political economy context even where the government is genuinely pro-reform)</p>
<b>Carrying out the dialogue</b>		
<b>Main inputs provided by the EBRD</b>	<p>Participation in donor coordination institutional mechanisms;</p> <p>Stand-alone TC projects;</p> <p>Policy dialogue by staff in the framework of specific investment projects and in support of establishing a legal and regulatory base;</p> <p>Joint TC initiatives and hybrid financial initiatives that combine a lending facility with grants/concessional funding (jointly with other international actors);</p> <p>Complex financial facilities through (such as via the Sustainable Energy Initiative, Ukraine Energy Efficiency Programme, and Ukraine Sustainable Energy Lending Facility) targeting various sectors and different economic agents (from Small and Medium Enterprises (SMEs) to large corporations);</p> <p>Investment projects in various sectors that are embracing an integrated approach to energy efficiency and climate change.</p>	<p> </p> <p>(provision of a comprehensive set of inputs)</p>
<b>Actors and roles</b>	<p>On the EBRD side actors engaged in policy dialogue include E2C2 team management, E2C2 specialists in London and Kiev, head of the Resident Office, sector team bankers, senior EBRD management, and staff of OCE and Legal Transition Team.</p> <p>On the government side these include the highest positions (Prime Minister) down to the specialists in the ministerial departments (Ministry of Energy and Coal Industry, Ministry of Environment and Natural Resources, Ministry of Regional Development, Construction and Communal Services, Ministry of Economic Development and Trade), National Energy Regulatory Commission, State Environmental Investment Agency (SEIA), Parliament and its committees.</p> <p>Consultants funded by the EBRD whose roles are to assist government agencies in developing new legislation and regulations in the respective areas, and to provide training, advice and consultations on organisation structure, professional development, public relations and other areas.</p> <p>Other international actors include IFIs such as the World Bank, International Finance Corporation, Nordic Environment Finance Corporation, Nordic Investment Bank; donors including European Union, the United States Agency</p>	<p></p> <p>(multiple actors with strong co-ordination in specific sectors but lacking overarching coordination on the government side)</p>

	<p>for International Development , German aid agency, Swedish International Development Agency; international organisations, forums and financial facilities such as United Nations Framework on Climate Change, Global Environment Facility, Clean Technology Fund, Eastern Europe Energy Efficiency and Environmental Partnership.</p> <p>All of the above are decision makers when allocating funds, and in other circumstances act as advisers, advocates and interested parties.</p> <p>Other domestic actors include municipal authorities and their networks, community service organisations active in E2C2 and renewable energy sphere. They play the roles of interested parties and advocates.</p>	
<b>Actions</b>	<p>Identifying priorities for engagement based on corporate strategies and needs of the country. Formalising approach through signing the agreement with the Ukrainian government (Sustainable Energy Action Plan) that stipulates areas for engaging in policy dialogue, providing TC and implementing investment projects.</p> <p>Analysing institutional setup and identifying relevant agencies with whom to collaborate on creating a legal base and removing regulatory barriers for investments in energy efficiency, climate change and renewable energy.</p> <p>Inclusive approach to engagement with beneficiaries, particularly in the area of legal drafting. This ensures significant buy-in by the government from the start and resilience of the system that obtains necessary skills and capacity from the start rather than after a “handover” ceremony upon TC project completion.</p> <p>Identifying sources of TC funding and adding them to the mix of investment funding to enhance the competitiveness of the commercial products, especially for public sector clients. Also using TC funds for stand-alone forward-looking and market-opening initiatives where policy dialogue is a core function performed by the EBRD and supported by highly qualified consultants.</p> <p>Employing a team of experts (E2C2) for managing daily relations with counterparts and TC projects in the area. Engaging other EBRD teams, in particular the Legal Transition Team and the Office of the Chief Economist, for delivering highly technical results; working in partnership with other banking teams for delivering E2C2 and renewable energy projects in various sectors or integrating energy efficiency objectives in conventional projects implemented by private and public sector clients.</p> <p>Use of transparent internationally recognised standards and approaches to contracting, procuring and implementing investment projects (and TC), that leads to efficient use of resources, significant savings and higher profitability of the investments.</p> <p>Active and consistent collaboration with other IFIs and donors on delivering agreed priorities and obtaining the government’s commitment to deliver much needed transformations to the economy and political reforms.</p>	<p>☺☺</p> <p>(a comprehensive set of actions that plausibly will produce the desired results)</p>
<b>Coordinating</b>	<p>Strong coordination mechanisms exist in specific sub-sectors of E2C2 and renewable energy sphere.</p> <p>Energy efficiency in residential buildings is very good example of effective coordination between multiple IFIs/donors, which has been happening for the last several years. Before that, different international actors had different strategies and the government often played them against each other. Since a strong coordination mechanism was introduced via a commitment to regular meetings and continuous information sharing on planned activities playing one off against the other has become impossible. More coherent and systemic dialogue is happening.</p> <p>Similar coordination mechanisms exist in climate change and renewables sectors, with slightly different actors.</p> <p>However, results are not always as positive due to challenges of not having a single committed and consistent Ukrainian counterpart (there are often changing personalities and institutions) and presence of strong economic power groups that pursue their own agenda that is not consistent with national interest and strategies.</p>	<p>☺☺</p> <p>(joining with others to speak with a single voice, better coordination on the government side needed)</p>
<b>Flexibility and reacting to events</b>	<p>Flexibility, empathy and ability to react quickly to a changing context were highlighted as being a key strength of the EBRD’s approach to operations and initiatives in E2C2 and renewable energy sphere in Ukraine.</p> <p>In a fragmented and unstable institutional environment, a fluid regulatory and legal base often makes unexpected turns to protect interests of specific</p>	<p>☺☺</p> <p>(speed of reaction, willingness to try new ideas,</p>

economic groups at the expense of entire sectors and other investors. There is a strong need for continuous monitoring of the situation and adjusting strategy and tactics accordingly.

A degree of “creativity” in launching investment projects in an environment where there are no legally defined terms and standards (for example energy efficiency in public buildings) is important.

Having an in-country team and well-integrated headquarter based experts visiting Ukraine on a regular basis helps to remain on top of the events and adjust expectations, actions and planned outputs accordingly. The EBRD’s willingness and ability to launch “demonstration projects” – pilots in areas with a non-existent or complicated legal and regulatory base – is a relative advantage comparing to other IFIs. It gives the EBRD an edge and potentially opens greater opportunities for future business in the sphere.

Greater sustainability of the results in sophisticated and technically complex initiatives is achieved through longer engagement in the dialogue and TC provision (for example, collaboration with National Energy Regulatory Commission). Support for implementation of reforms introduced through policy dialogue is critical.

staying informed and being prepared to remain engaged over the long term are important given the very fluid policy and legal environment in Ukraine)

## Results achieved

### Outputs and outcomes

#### Outputs

A number of laws and regulatory acts have been approved and are in the process of implementation, in particular in the areas of renewable energy, green tariffs, carbon trading, ongoing work in the sector of energy efficiency of residential and public buildings.

Comprehensive studies and evidence base developed in the framework of several projects (for example, a marginal abatement cost curve study for emissions reduction investments and a strategic environmental review by the Ukraine sustainable lending facility) provided equal access to reliable data to Ukrainian and international partners negotiating on strategic initiatives in the sphere of energy efficiency, climate change and renewable energy.

Ukraine Sustainable Energy Lending Facility (USELF) was established as a financial facility to support small and medium sized investment projects in the renewable energy sector – 6 projects approved by mid-2013.

A pilot project on energy rehabilitation of public buildings in Dnipropetrovsk was launched as a living case for enhancing legal and regulatory bases in energy management and contracting.

From 2007-2011 UKEEP was delivered through local banks resulting in about 40 energy efficiency projects with local companies working in various sectors worth of US\$110 million.

The USEFF facility launched at the end of 2013 for providing loans via local banks and leasing companies to Ukrainian businesses willing to invest in energy efficiency and renewable energy projects.

Eighty projects were implemented in the framework of the Sustainable Energy Initiative (SEI) across various sectors.

#### Outcomes

Companies are investing in new generating facilities as a result of the clear and well-structured system of primary and secondary legislation in the sphere of renewable electricity market regulation and green tariffs;

The National Energy Regulatory Commission’s capacity is improved and its ability to develop and implement independent policy in electricity market regulation is significantly enhanced, though requiring further improvements;

The State Environmental Investment Agency is better able to negotiate on carbon trading schemes due to the studies and data developed for the Ukrainian economy by the EBRD and its consultants. A number of models were developed, which will facilitate future decision on carbon trading mechanisms for Ukraine;

Construction and management of public and residential buildings will now function on the basis of enhanced energy efficiency standards that were recently integrated in the legislation and standards of this sector;

The capacity of the Ministry of Regional Development, Construction and Housing has been strengthened to develop and implement an energy




efficiency policy in its area of responsibilities (residential and public buildings);

Good partnership relations have been established with all key government agencies and parliament creating an environment conducive to further policy dialogue initiatives on important regulatory and legal changes;

Well-functioning donor co-ordination mechanisms in several sub-sectors where the EBRD and other IFIs/donors are playing an active role in encouraging the Ukrainian government to refine its policy and financial allocations in a way that encourages energy efficiency and promotion of renewable energy generation;

Sustainable energy efficiency projects contributed to reduction of greenhouse gas emissions equal to three per cent of Ukraine's annual emissions in 2009, and increased energy efficiency which saved eight per cent of Ukraine's annual energy import volume in 2009;

Projects implemented under the framework of the Ukraine Energy Efficiency Programme contributed to a reduction of CO<sub>2</sub> emissions by 520,000 tonnes per year and a reduction of energy consumption by 2.2 million MWh per year.

<p><b>Supporting policy adoption and implementation</b></p>	<p>The EBRD was instrumental in developing energy efficiency norms and regulations for the construction industry. It assisted in drafting secondary legislation and regulations that are crucial for enhancing energy efficiency of residential and public buildings.</p> <p>One investment project in Dnipropetrovsk will enable testing of the proposed legal changes in the public buildings sphere.</p> <p>The Bank's inputs to preparing primary and secondary legislation in the renewable energy market regulations, green tariff introduction and enforcement was, and still is crucial. It supports a wide range of stakeholders from executive agencies and Parliament; it provides in-house advice to the electricity market regulator for a number of years and further TC is planned to support first stages of implementation process.</p> <p>In the past the EBRD supported the key agency in carbon trading sphere helping it to develop a range of models relevant for Ukrainian context.</p> <p>Due to strong vested interest groups active in the E2C2 and renewable energy sphere, tactics for delivering EBRD strategic priorities have to be reconsidered from time to time in order to adhere to the Bank's integrity principles.</p>	<p></p> <p>(Consistent and long-term dialogue with some key agencies is often necessary to bring about change and further engagement in implementation is often necessary for sustainability)</p>
<p><b>Evidence of learning</b></p>	<p>The E2C2 team has a great deal of evidence and data that illustrates the effectiveness of various initiatives and financial instruments used in E2C2 and renewable energy area over the years. Some of those were more effective than others.</p> <p>To tap into all available resources and to ensure availability of TC resources in the future, the EBRD has to look into past mistakes/unsuccessful initiatives and integrate this experience in future initiatives.</p> <p>The ongoing process of identifying priorities for policy dialogue in E2C2 area should integrate some important lessons from the past.</p> <p>No doubt this experience has been internalised within the team. However, a more explicit capturing of learning for both internal and external use would add further value to the EBRD's work.</p> <p>Relations with the secondary stakeholders from the civil sector and wider public could be further developed.</p>	<p></p> <p>(previous experience is integrated in the design of new operations and initiatives but more visible capturing of learning and greater engagement with a wider group of stakeholders would add value)</p>
<p><b>Reviewing, monitoring, reporting and evaluation</b></p>		
<p><b>Reviewing</b></p>	<p>The E2C2 team reported that progress review happens at three levels. First, at a contract management level, the E2C2 operation leader negotiates clear deliverables and milestones with the consultants. In the residential energy efficiency project, this is followed up with fortnightly project management phone calls with the consultant team leader to discuss progress, issues that need resolving and next steps; and formal quarterly reports from the consultant. Second, internally, there are regular discussions within the E2C2 team about the project progress as well as during the formal performance review process. Finally, regular update meetings are held with government officials. Again, agenda items for these meetings include progress, issues that require Ministry's attention and next steps.</p>	<p></p> <p>(given the inherently political nature of policy dialogue in general and the very uncertain and fluid context in which it takes place in Ukraine, regular reviews</p>

	<p>The review described above is very much at the level inputs, actions and outputs. Important as this is, there is also a clear advantage to undertaking periodic strategic reviews that take account of progress, or lack of it, towards the higher level results of outcomes – such reviews should be carried out in light of a scan of the context and any changes therein, particularly changes in the political economy of the reform context. The continued validity of assumptions embedded in the policy dialogue needs periodic assessment along with an updated risk assessment.</p> <p>Review of major areas of policy dialogue can benefit from independent external input as those close to the action can become blinded to important issues.</p>	<p>are needed to adjust strategy and tactics if early warning signs show that things are “going off the rails” or that not much progress is being made)</p>
<b>Monitoring</b>	<p>In common with other cases, the evaluation did not find any evidence of formal monitoring of policy dialogue, particularly in terms of monitoring progress against a hierarchy of expected outputs, outcomes and impacts that are linked together based on a set of cause and effect relationships or theory of change.</p> <p>Formal monitoring should also take place for risks and potentially influential changes in the context.</p> <p>Monitoring should provide the hard information for management of the policy process by providing early warning of emerging problems or windows of opportunity opening up.</p> <p>Monitoring should also provide early learning.</p>	<p>🔍</p> <p>(structured monitoring of progress pays big dividends in terms of improved management of the policy process and enhanced ability to tell the story of progress and challenges)</p>
<b>Reporting</b>	<p>The E2C2 team reported that in each area terms of reference contain clear indications on reporting frequency and formats; reports are typically of two forms: for internal use, submitted to the operations leader and available to the E2C2 team through the information and knowledge database; and external, that are typically translated into Ukrainian and are made available at project websites such as <a href="http://www.uself.com.ua">www.uself.com.ua</a> and <a href="http://www.teplyidim.com">www.teplyidim.com</a>.</p> <p>The evaluation observes that reporting should go beyond the delivery of outputs, which is what mostly concerns consultants, to also cover the achievement of outcomes and impacts and the learning that can be derived from the experience gained.</p> <p>As noted in other cases, telling the story of policy dialogue successes and failures can be a more effective reporting method, or at least a good complement to more quantitative reporting.</p>	<p>🗨️</p> <p>(reporting should cover all levels of results so that the broader strategic purpose of the policy dialogue is not lost sight of and learning is formally captured)</p>
<b>Evaluation</b>	<p>No policy dialogue initiative studied by the evaluation made any provision for independent evaluation or external review. Given the complexity of most policy dialogue initiatives, their frequently long duration, the “tunnel vision” that can develop through close involvement of a long period, and the importance of learning, periodic evaluation can add significant value and should be provided for.</p>	<p>🔍</p> <p>(independent evaluation of policy dialogue initiatives should be built in)</p>
<b>Resourcing and rewards</b>		
<b>Sufficiency of resources and skills available</b>	<p>By and large, there are sufficient resources and skills available in the E2C2 team and other EBRD teams that provide inputs into E2C2 and renewable energy sphere.</p> <p>Having a strong in-country presence is a key strength.</p> <p>The area also has access to a wide range of financial resources that enable implementation of forward-looking TC projects and provision of grant funding alongside investment projects in order to increase their commercial appeal to clients.</p> <p>However, in some circumstances TC funding for continuity of team composition is unpredictable, (also in-country, as some “staff” positions are directly funded by time-limited TC projects).</p> <p>More proactive use of extensive knowledge of political economy in the sphere might be necessary in some areas where economic interests of various power groups are particularly high.</p>	<p>👥</p> <p>(diversified sources of funding and very strong skill base with good knowledge of local context)</p>

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**Incentives and rewards**

Incentives and rewards are considered adequate in the area, as the E2C2 team does not have banking functions and its performance is judged by the progress in policy dialogue, success of TC projects and launch of new investment projects that are managed by other banking teams.

However, as in other cases the visibility of efforts in policy dialogue remains low and there is need for changes in the performance assessment system in order to enhance it.

☞  
(visibility of policy dialogue work is important for the purposes of recognition and reward, learning and independent review)

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## 1. Introduction

The EBRD's policy dialogue in the sphere of energy efficiency was selected as a case study based on the intensity of EBRD engagement, scope of operations and the dramatic effects it already has and will continue to have on the competitiveness of national economy and sustainability of economic growth in Ukraine. Two key features make the E2C2 and renewable energy sphere different from other case studies – its global nature and its across-the-board effect on all spheres of economy and society.

Because of these two fundamental features, initiatives in the sphere of energy efficiency, climate change (E2C2) and renewable energy are usually initiated and are implemented through global partnerships where donor coordination is paramount. Certainly the EBRD's experience in Ukraine is one of shared priorities and collaboration with like-minded IFIs and donors (including the World Bank, International Finance Corporation (IFC), European Investment Bank (EIB), European Union (EU), USAID) in the framework of global programmes and facilities (such as the Clean Technology Fund and Global Environmental Facility) that bring together national governments, international organisations, CSOs and others.

Energy efficiency is an integral part of policy dialogue in almost every sector of the EBRD's activity in Ukraine – from agribusiness and manufacturing to district heating, property and financial institutions. However, as a “new” area, addressing energy efficiency (and renewable energy) requires creation of a legal and regulatory base and changes to many other laws, the adoption of new institutional and governance systems, and changes in social policy. Addressing energy efficiency effectively also requires investments in human capital and the capacity and willingness of private and public organisations to embrace sustainable development and efficient use of resources. Cultural and behavioural changes at all levels and in all circumstances are essential for sustainable effects from E2C2 measures and for progressive reduction of negative impact of human activities on the environment and the long-term profitability of businesses.

Due to the scale of Ukraine's economy, its energy intensity and its critical importance in the continental energy security system the country needs to make an effort – financial and otherwise – to bring energy and resource consumption to the levels which are sustainable, beneficial for dynamic economic growth, improvement of people's wellbeing and for enhanced country's competitiveness in global markets.

This study begins by examining the context for policy dialogue in the energy efficiency sector, including the global, national, governance environments and the EBRD's strategy. It then discusses the policy process, including conception and planning, implementation, achieving results, and issues with reporting, evaluation and resourcing. The study concludes with presentation of policy problems and the results chain, with observations about progress and levels of success.

## 2. Context for policy dialogue

The context for policy dialogue in the energy efficiency area is considered along four dimensions:

- (i) Global context;
- (ii) National context of Ukraine;
- (iii) Governance and institutions of Ukraine;
- (iv) The EBRD's strategy and tactics in the area.

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## 2.1 Global context

The negative consequences of climate change create higher risks for the economies and livelihoods of all countries regardless their levels of economic development and wellbeing. As such, addressing climate change requires a global architecture of institutions, actions and finance. Over several decades, the international community has made significant efforts to create common platforms for mitigating the negative consequences of climate change. Platforms like the United Nations (UN) Framework Convention on Climate Change (UNFCCC (United Nations Framework Convention on Climate Change) including Kyoto Protocol and Copenhagen Accord), International Energy Agency, UN Environmental Programme, G8, IFIs, financial instruments like joint implementation projects, Clean Development Mechanism projects, Climate Investment Funds, Clean Technology Fund, Global Environmental Facility and joint analytical/monitoring tools such as World Energy Council, the Organisation for Economic Co-operation and Development (OECD) and other institutions and frameworks are forming the foundations of the global climate change institutional and financial system.

While recognising the fundamental role of UN institutions and international accords, which led to creation of various institutional and financial mechanisms, it is important to acknowledge the role of other organisations. In particular, the role of IFIs in the global climate change architecture is crucial as they provide or act as conduits for a significant share of total climate change finance. The EBRD is one of the leading IFIs investing in projects and activities (often with grant funding provided by others) directed to E2C2 and renewable energy. The EBRD initiated and is jointly implementing with five other IFIs an initiative on unifying the standards of reporting on climate financing initiatives (the EBRD's E2C2 team hosts the secretariat of this initiative). The Second Annual Report on climate financing in 2012 published in November 2013 shows that the EBRD is providing 12 per cent of the total US\$27 billion climate finance among the group of five multilateral development banks.<sup>2</sup> At the same time, the EBRD's regions of operations attracts 34 per cent of total spending on E2C2 by development banks.<sup>3</sup>

Ukraine has a very strong commitment to the international community with regard to energy efficiency and climate change, which are enshrined in the international accords. It is one of the most active countries in the framework of financial mechanisms established by Kyoto Protocol. Official government commitments however, are not always in congruence with government decisions and actions. The latter are often under the influence of powerful economic lobby groups.

Due to a significant surplus of emission reduction, which is calculated on the basis of difference of emissions volumes in current year relative to the base year (1990),<sup>4</sup> Ukraine attracts a great deal of interest from investors in emission reduction projects. For example, it is leading country in the world for hosting Joint Implementation projects (90 as of April 2012),<sup>5</sup> which have contributed to delivery of about 86 million Emission Reduction Units (ERUs). Ukraine is the world's biggest supplier of ERUs and as of June 2012, 41 per cent of the world's ERUs were greenhouse gas (GHG) reduction units from Ukraine.<sup>6</sup> Its share has the potential to grow as Russia has not signed the agreement with regard to second stage of implementation of Kyoto protocol instruments and thus it cannot host projects in the framework of Joint Implementation and other financial tools. Overall foreign investments in projects related to ERUs generation to the middle of 2012 totalled € 650 million.

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2 International Development Bank, Asian Development Bank, Inter-America Development Bank, European Bank for Reconstruction and Development, African Development Bank

3 [Joint Report on multi-lateral development bank Climate Finance 2012](#)

4 In 2010 it was 59 per cent below 1990 level

5 [National Ecological Centre of Ukraine \(2012\) Critical Reflections on Joint Implementation Projects in Ukraine.](#)

6 Mission terms of reference for CTF Investment Plan for Ukraine, February 2013

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There are other international commitments that have significant impact on the Ukrainian policies in the areas of E2C2 and renewable energy. The most crucial of these is commitments as member of the European Energy Community. Ukraine became a formal member of the Energy Community in February 2010. This step not only approximated Ukraine to the integration into continental energy security system, it also spurred reforms in the spheres of energy use and energy efficiency. Ukraine undertook substantial commitments in energy sector reform, many of which are focused on energy efficiency and renewable energy. In particular, the Protocol of Ukraine's Accession to the Treaty establishing the Energy Community determines commitments aimed at *'improving the environment situation in relation to network energy and related energy efficiency, foster the use of renewable energy...'*<sup>7</sup> These commitments are mainly in the sphere of adhering to a number of EU Directives in the energy efficiency and energy safety sectors, their integration into Ukraine's legal, regulatory and institutional frameworks, and implementation of specific measures that would lead to improved energy use and increase of renewable energy in the total energy production of Ukraine (up to 10 per cent by 2020).

## 2.2 National context

Ukraine faces significant challenges of environmental protection, energy efficiency and climate change. Ukraine spends five to six per cent of its GDP on gas, 80 per cent of all energy resources are imported, while the potential for increasing the share of local energy and heat production, especially from renewable and alternative energy sources is huge. Ukraine consumes three times more energy units for producing one unit of GDP compared to the EU average. At the same time, greenhouse gas emissions are high despite a significant drop from the base level of 1990 (by more than half). Ukraine GDP emission intensity is three times higher than average level of European members of OECD.<sup>8</sup>

Dependence on the critical import of energy resources in combination with the high energy intensity of the economy is staggering and requires dramatic changes in the way energy is being produced, consumed and recycled. Among many groups of the population there are unfortunately still widespread perceptions of endless and cheap energy resources. This belief persists despite the share of energy and fuel constituting a considerable share of most household budgets (according to texty.org.ua, 45 per cent of the minimum wage in Ukraine is spent on communal services that include electricity, heating, water and maintenance services) and is anything but cheap. However, rising electricity and heating prices are not a strong enough motivation for people to change their attitudes to energy consumption, recycling and saving. Scarcity of information and educational materials, the absence of a basic infrastructure that permits people to be in control of their energy consumption (for example heat regulators) make energy efficiency a challenging task to achieve in everyday life. International experience demonstrates that simplicity, high demonstration effect and stimuli for reducing energy consumption are effective instruments for changing behaviour.

Currently the Ukrainian government has no resources of its own for educational and public relations campaigns on the issues of energy efficiency and climate change. Most of current initiatives are being implemented and funded by international organisations, foundations, CSOs, and the private sector. As in many other policy areas, the government lacks resources for prevention of the problem and wastes billions of Euros on supplying wasteful volumes of energy for maintaining unaffordable and extremely damaging levels of energy consumption and emissions (See Box 1 below).

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7 International Energy Agency (2012) Energy Policies Beyond IEA countries. Ukraine 2012: Executive Summary: Key Recommendations.

8 The Demand for Greenhouse Gas Emissions Reduction Investments: An investors' Marginal Abatement Cost Curve for Ukraine (2012) Report by NERA/Bloomberg/Global Carbon for EBRD

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## Box 1 Challenges of prioritising in Ukraine's municipal finances

In Ukraine's district heating sector, significant sums of money from the state budget are spent annually on compensation for the difference between tariffs and the actual cost of heat. These amounts exceed the amount of necessary investments for upgrading the infrastructure to cut energy/heat losses and making buildings more energy efficient. Just one city, Dnipropetrovsk, received €56 million from state budget in 2012 for compensating the difference between tariffs and costs of heat production. At the same time, a lack of investments for capital and maintenance works means that losses of energy/heat could reach up to 50-70 per cent of the total consumed volume.

According to the World Energy Council, an international network of experts and practitioners working in the sphere of safe and sustainable energy, Ukraine uses energy in a very unsustainable way. In the 2013 Energy Sustainability Rating Ukraine was ranked 94th among 129 countries. The rating is based on a number of indicators that illustrate three key blocks of energy sustainability – energy security, accessibility of electricity and sustainability.

At the same time, Ukraine is one of the biggest polluters and it is ranked 21st for greenhouse gas emissions. It is one of the most active members of UNFCCC instruments and mechanisms, including the ones introduced by Kyoto protocol ratified by the parliament of Ukraine in 2004. Various ministries and agencies of the Ukrainian government are implementing a range of projects and initiatives at national and regional levels. They are aimed at reducing the negative impact of climate change and most importantly – increase the efficiency of energy generation and use across the sectors of economy and social sphere (see section 2.3 below for more details).

The share of renewable energy sources in total energy production of Ukraine is currently seven per cent and there is a great potential to increase this.

Ukraine's strategic priorities in the area of energy efficiency and climate change are determined by its key commitments in the framework of the global accords (for example the Kyoto Protocol) and international agreements (such as Energy Community membership). Among key commitments are:

- Increase of the share of renewable energy sources in the total energy balance of the country to 10 per cent by 2020 (Energy Community);
- Reduction of greenhouse gas emissions by 20 per cent by 2020 (in relation to base level of 1990) (Kyoto);
- Reduction of gas consumption from 76 to 50 billion m<sup>3</sup> in 2030 (Ukraine Energy Strategy).

More facts and figures on energy efficiency and climate change policy in Ukraine are presented in Annex 1 of this case.

## 2.3 Governance and institutions

Many interlocutors interviewed by the evaluation highlighted the reality of a highly complicated, fragmented and incoherent institutional system that exists in the area of E2C2 policy and renewable energy in Ukraine. There is no single central government agency responsible for the fundamental E2C2 and renewable energy policies – rather, various aspects are allocated to various agencies among which coordination is poor.<sup>9</sup>

The International Energy Agency in its report on Ukraine in 2012 highlighted that in Ukraine:

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<sup>9</sup> There is Inter-agency working group that should ensure the co-ordination of policies in this sphere however from a range of interviews we had there was no indication of how effective the work of this group is

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‘...responsibility for energy efficiency policy is vested in numerous government ministries and agencies. This makes coherent and consistent energy efficiency policy formulation and implementation difficult. The government needs to strengthen the capacities of the lead ministry on energy efficiency to enable it to more effectively coordinate with the other relevant bodies. This is indispensable in order to quickly and effectively realize Ukraine’s large energy efficiency potential and to benefit from related opportunities to foster economic growth and employment. The government should take measures to ensure strong political leadership and coordination of energy efficiency policy at central government and local levels, including municipalities’.<sup>10</sup>

Roughly there are two blocks of agencies with which the EBRD is collaborating on the issues of E2C2 and renewable energy:

- i) The energy block that represents supply side;
- ii) The environmental/ housing block that represents demand side.

Figure 1 below illustrates the compartmentalisation of policy dialogue that is going on in different vertical structures of decision making. Individual policy initiatives that were/are implemented in specific sectors are targeting individual agencies and ministries. There is no cross-departmental co-ordination centre or committee that is responsible for issues of E2C2 and renewable energy. Policy dialogue has to be conducted with several institutions, often in parallel and it is often being driven by priorities of international organisations/IFIs rather than national strategic frameworks and operational plans. For example, the EBRD’s work in E2C2 and renewable energy sphere is determined not by Ukrainian Energy Strategy, action plan or any other governmental strategic framework. Priorities for collaboration are agreed in the Sustainable Energy Action Plan that was signed with the Ukrainian government in June 2009 (see next sub-chapter) and which is based on the EBRD’s corporate Sustainable Energy Initiative (SEI).

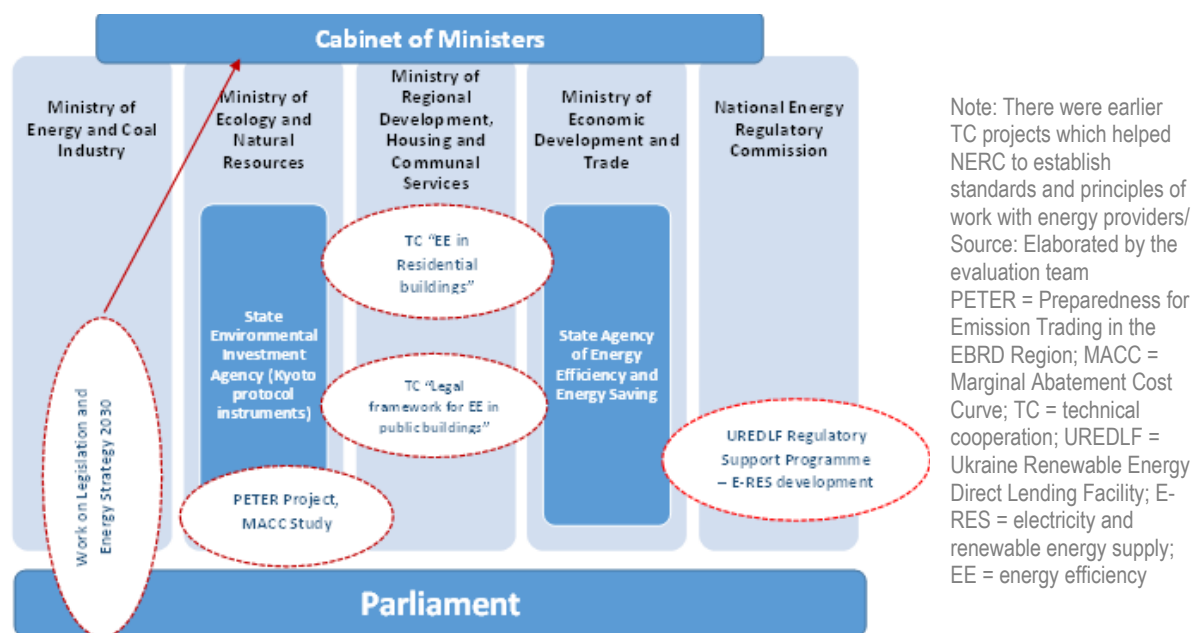
Ukraine is still in the process of updating its Energy Strategy 2030 (initially approved by the Cabinet of Ministers in 2006). Most IFIs, donors and CSOs involved in the process of consultations complained that the draft does not focus enough on renewable energy sources and that strategy has too many priorities. The EBRD is engaged in the process of developing/commenting on the draft Energy Strategy jointly with other IFIs/donors, in particular World Bank and the EU.<sup>11</sup>

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<sup>10</sup> International Energy Agency (2012) Energy Policies Beyond IEA countries. Ukraine 2012: Executive Summary. Key Recommendations.

<sup>11</sup> though the latest round of comments (in spring 2013) by the World Bank and other IFIs/donors was made without the EBRD’s endorsement, due to a lack of resources available in the Power and Energy team to provide comments.

Figure 1: Institutional framework in E2C2 and renewable energy sphere and relevant EBRD TC projects and policy dialogue activities



Similar to many other sectors of the Ukrainian economy, the E2C2 and renewable energy sphere suffers from non-transparent mechanisms of decision-making and funds allocation, closed networks and vested interests of high-level government officials and members of parliament who are representing interests of large economic groups (in energy or utilities sector) while supposedly operating in the public interest. Lobbying the “Ukrainian way” is a very obscure process that involves hidden alliances and anonymous partnerships. Often international organisations and investors are becoming hostages of the unscrupulous representatives of Ukrainian business that hijack their agenda and use initially well-intended reforms in their own interests by closing whole market segments to competitors.

In particular, legislation and regulations in the sector of green tariffs and local content were initially well-designed but were subverted, often just before final approval, in a way that benefits a very limited number of companies. In this situation, very few foreign investors are willing to risk and join business projects in the Ukrainian renewable energy sector. One of the EBRD’s key demands in this aspect of reform is that there be a transparent and universal set of rules for all that would allow a greater number of potential investors to enter this highly promising and profitable sector.

## 2.4 The EBRD’s strategy in the energy efficiency and renewable energy sector

SEI was launched in 2006 as the overarching framework for all the Bank’s activities in this sphere. It is currently in its third stage of implementation (2011-2014) after completing stages one (2006-2008) and two (2009-2011). Overall, since 2006 and up till October 2013 the EBRD invested €12.1 billion in SEI projects across its countries of operations. This is stated to have contributed to saving 57 million of tonnes of CO<sub>2</sub>. As for the structure of funds allocation, 31 per cent of SEI investments were directed at supply-side energy efficiency, 46 per cent at the demand-side of energy efficiency, and 23 per cent at renewable energy.<sup>12</sup>

<sup>12</sup> Information from EBRD website.

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All policy dialogue initiatives, TC projects and E2C2 related investment projects in Ukraine are linked together through a number of strategic country-specific documents of the EBRD, in particular:

- The Ukraine Country Strategy 2011-2014 where E2C2 and renewable energy are identified as one of the core priorities of the Bank in Ukraine;
- A Sustainable Energy Action Plan agreed jointly with the Ukrainian government signed in 2009, which indicates the main priorities of EBRD investments in E2C2 and renewable energy sector in Ukraine, TC activities and areas for intensive policy dialogue.

These strategic documents identify five main areas of the EBRD's activities in E2C2 and renewable energy sphere, in particular:

- i) Industry – sustainable energy activities in the corporate sector in the framework of Industrial Energy Efficiency Programme; assistance in developing a system for transfer of energy efficient and climate-friendly technologies;
- ii) Sustainable Energy Financing Facilities – via financial intermediaries providing finances to SMEs, small-scale renewable developers, and residential clients; facilitating energy efficiency investments in the residential sector;
- iii) Cleaner Energy Supply – assistance in high-efficiency rehabilitation and modernisation of energy sector including production, transmission and distribution. Support in development and implementation of the long-term sustainable approach to power supply rehabilitation and investment;
- iv) Renewable Energy – investments in small hydro and wind energy installations; comprehensive support for the development of the regulatory environment, and for investments in the renewable energy sector. Activities in the framework of USELF; possibly launch of a dedicated Biomass Energy Financing Facility, providing there will be an adequate regulatory framework;
- v) Municipal Infrastructure and Buildings – projects with significant energy efficiency effect in district heating, water supply and waste water, solid waste, public transport, and energy efficiency improvement of residential and administrative buildings. Supporting the development of commercial, organisational and financial structures for financing energy efficiency in public and residential buildings through dedicated TC;
- vi) Carbon Finance – support to SEIA to increase the potential for carbon financing in Ukraine, including international emission trading supported by Green Investment Schemes; development of new financing instruments to support Joint Implementation projects.

Many EBRD teams are involved in various aspects of these activities and investment projects are being implemented by respective sector banking teams. However policy dialogue is being shaped and performed by E2C2 team with the support from management at Resident Offices and London headquarters. Currently policy dialogue is focused on four key areas:

- i) Public buildings;
- ii) Residential buildings;
- iii) Renewables;
- iv) Climate change (terminated in 2012).

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One of the four areas – climate change – has seen a range of policy dialogue activities from 2008 to 2012 supported by EBRD shareholders fund and some contributions from national government development agencies. But currently there is no ongoing policy dialogue in this area or stand-alone TC project. The EBRD's Board made a decision that further TC activities in this area are more relevant for other IFIs/donors and that the EBRD's resources should be put to better use by allocating them to other segments of E2C2 sphere. This strengthens the thesis put forward by a number of interlocutors consulted by this evaluation – namely, that to be effective, policy dialogue needs to be prioritised, and preferably these priorities should be determined within a coherent and comprehensive strategic framework.

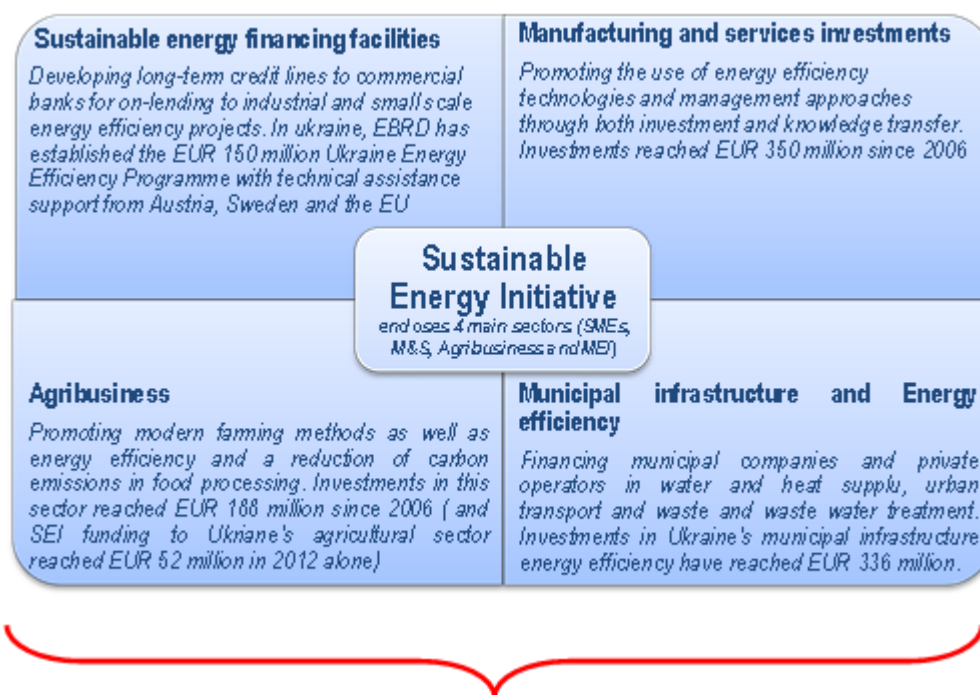
The following financial instruments/facilities were launched in this sector:

- i) SEI (see Figure 2) – launched in 2006 with the aim of scaling up sustainable energy investments in the EBRD's regions of operations.<sup>13</sup> In Ukraine 80 SEI projects €1.7 billion (up till the end of 2012) have been approved which represents 25 per cent of the total EBRD business volume in the country. More than half of those projects are in industry. Due to the implementation of EBRD projects significant reductions in energy consumption have reportedly been achieved (eight per cent savings of Ukraine's energy imports in 2009) and greenhouse gas emissions (three per cent of emissions in 2009);
- ii) The Ukraine Energy Efficiency Programme (UKEEP) – launched in 2006 and completed in 2011 this was a €150 million investment programme along with TC funding provided by Austria, Sweden and the EU. It is a credit facility developed by the EBRD and managed by Ukrainian banks, targeting private companies working in all sectors of Ukrainian economy which are looking to invest in energy efficiency or renewable energy projects. Forty investment projects (for up to € 2.5-3 million) were implemented reportedly saving 2.2 million MWh energy per year and reducing CO<sub>2</sub> emissions by 520,000 per year.
- iii) The Ukraine Sustainable Energy Lending Facility (USELF) – €50 million initiative supported by Clean Technology Fund (CTF) (€20 million of concessional funding) and Global Environment Facility (GEF) (€5.7 million TC funding). It is an integral part of SEI in Ukraine that is specifically targeting sustainable energy generation and invests in renewable energy projects (for example hydro, solar, wind, biomass and biogas). Six projects were approved by mid-2013 with five more in the pipeline – in solar, wind, small hydropower and biomass energy generation sectors.

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<sup>13</sup> Sustainable Energy Initiative in Ukraine Factsheet, EBRD October 2013

Figure 2: Sustainable Energy Initiative in Ukraine



Source: EBRD website

Table 1 summarises a number of key E2C2/renewables TC projects of the EBRD in Ukraine.

Table 1: TC projects in E2C2/renewable energy sphere

Date <sup>14</sup>	Project	TC project amount	Aim of the TC and Objectives
4-06-09	Preparedness for Emission Trading in the EBRD Region (PETER) <sup>15</sup> Phase II <sup>16</sup>	€ 750,000:  € 307,175 for the PETER phase II in Kazakhstan  € 108,363 for PETER Phase I (Ukraine and Kazakhstan)	Develop a country specific roadmap for full emissions trading schemes. The key objectives were to assist the Ukrainian government in:  (a) Understanding costs and benefits of introducing domestic cap-and-trade regimes compared to other instruments of climate mitigation policies;  (b) Analysing the cap and trade options and criteria for linking with external emissions trading schemes, such as EU ETS;  (c) Identifying potential road maps towards (i) implementation of domestic cap and trade schemes and (ii) linking with external cap and trade schemes;  (d) Increasing preparedness and providing practical tools to create a platform and structure for potential discussions with external partners on linking carbon markets. <sup>17</sup>
14-10-09	Study on Adjusted Marginal Greenhouse Gas Abatement Cost	€1 million covering Kazakhstan, Russia,	Engage a consultant to review climate change mitigation measures in some EBRD countries. This report will evaluate the cost-effective greenhouse gas emissions reduction measures available in various sectors and quantify the impact of different

<sup>14</sup> Date of Memorandum for Board approval

<sup>15</sup> PETER was approved by TC Com in June 2011 to go ahead in two phases

<sup>16</sup> Phase I of PETER delivered an overview of emissions trading systems globally and in the EBRD region. Phase I was finalised with a workshop organised in Kiev to discuss the deliverables of the first project phase with policymakers and business representatives.

<sup>17</sup> Source: www.ebrdpeter.info

Date <sup>14</sup>	Project	TC project amount	Aim of the TC and Objectives
	Curves	Turkey and Ukraine	barriers to their implementation.
18-06-2011	Improving the Energy Efficiency of Residential building	€1 million	Improve energy performance of buildings in Ukraine by: a) creating demand for investment in higher performing equipment and materials through the promotion of minimum energy efficiency performance standards and best practice solutions for energy efficiency performance of buildings; and b) mitigating investment barriers by instigating an enabling environment for investments to improve energy efficiency in buildings through the provision of policy and regulatory support.
23-11-2011	Ukraine Sustainable Energy Lending Facility (USELF) – TC component	Up to €5.72 million from the Global Environment Facility	<ul style="list-style-type: none"> <li>– Pipeline Preparation;</li> <li>– Institutional support for policy dialogue and supporting implementing legislative and regulatory reforms for renewable energy (Mercados);</li> <li>– Enabling environment for energy projects;</li> <li>– Providing resources to ensure information dissemination and coordination between government, agencies and developers;</li> <li>– Environment support to i) conduct Strategic Environmental Assessments covering the main technologies and regions to benefit from the Facility , ii) assess environmental approval procedures and standards;</li> <li>– Project Development Support: i) screen projects to assess technical and commercial visibility, ii) assist borrowers under the Facility in project preparation and iii) conduct project monitoring.</li> </ul>
5-09-2013	Legal Infrastructure for Private Sector Energy Efficiency Projects in Dnipropetrovsk	TC funding of €266,150 from SIDA	Among a range of TC projects to support investment operation in Dnipropetrovsk there is one TC project - “Energy performance contracting” – that will address the challenges of enabling legal framework for Energy Service Company (ESCO) projects in Ukraine

### 3. Policy process

Observations about the policy process in the E2C2/renewables sphere follow the conceptual framework developed for this evaluation. The framework considers policy problem identification, selecting and selling policy messages, policy actors taking actions that lead to policy choice and implementation, which in turn give rise to identifiable policy outcomes. The observations and conclusions are structured along the following lines:

- Conception, planning and strategy;
- Carrying out policy dialogue;
- Achieving results;
- Reviewing, reporting and evaluation;
- Resourcing and rewards.

Findings have been derived largely on the basis of interviews held with almost all of the main policy actors in the public-private dialogue in the energy efficiency sub-sector along with discussions with informed observers, supplemented by a review many documents.

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### 3.1 Conception, planning and strategy

Under this area we consider:

- The reasons why the EBRD decided to engage in policy dialogue and whether there was clarity on this;
- How the problems that become the focus of the dialogue were decided upon as meriting attention;
- How the “solutions” to the problems, which became the policy messages the EBRD advocated, were chosen as being the “right” option and how these messages were validated;
- Whether there was clarity regarding expected results;
- Whether and how strategy and tactics were decided upon.

As in other sectors of EBRD activity, policy dialogue and TC in the E2C2 sphere is working towards opening markets and supporting investments. In this sector, the “opening opportunities” strand of policy dialogue has been significantly greater than in others – in most cases policy dialogue started first and specific investment projects followed when significant work in legislation, regulatory environment, and capacity building had been done. In other sectors of EBRD work in Ukraine the process of dialogue is often following investment operations and responding to their needs and the greater demand for reforms in the specific sector.

There are four possible scenarios for launching policy dialogue aimed at addressing specific challenges, each of which requires a somewhat different strategy:

- *Being guided by the Ukrainian government’s requests for assistance/ recommendations* – when vision of the problem is shared and the solutions are difficult to develop without IFI/donor support. For example policy dialogue and accompanying TC in the climate change sector were launched as a result of a clearly articulated request from the Ukrainian government which wanted to fulfil its international obligations and needed specific and quite technical support for doing it;
- *Being guided by the EBRD’s corporate strategies, international accords and commitments* – when vision of the challenge is shared but considerations of the solutions might differ significantly and efforts are required to overcome those. This is relevant in case of E2C2/renewable energy sector. SEI in Ukraine was launched in 2006 in the framework of an EBRD-wide drive towards higher energy efficiency and reduction of negative impact due to climate change. The EBRD Country strategy (2011-2014) and Sustainable Energy Action Plan (signed with the government in 2009) which is based on SEI priorities are outlining the frontiers in the framework of which the EBRD is working in Ukraine and where new opportunities could be opened after negotiations with the government counterparts;
- *Being guided by potential clients* – these might be very specific solutions for very specific problems which bar investors from entering the Ukrainian market. Dialogue is built around the mechanisms rather than conceptual solution, as there might be wider mutual understanding but significant administrative and other barriers. Policy dialogue is being initiated when a real opportunity for investment exists and the potential transition and profit effects are high but the legal and regulatory base is not in place yet and some creative approach is needed for starting the process. This is the case for residential and public buildings sub-sectors of the E2C2 sphere

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(ESCO and ESC work in the framework of existing legislation), as well as some sub-sectors of the renewable energy strand;

- *Being guided by existing clients* – so called “reactive” dialogue is mainly related to addressing problems with current investment projects that could not progress to the desirable goal due to legal, regulatory or institutional barriers (including differences in interpretation of the legal/regulatory framework and reversals or attempted subversions of policy) that need to be addressed jointly with the Ukrainian government or local authorities. These mainly occur in projects being implemented in the framework of SEI where E2C2 team provides technical and expert support (for example for a multi shopping mall project in Lviv).

E2C2/renewable energy policy dialogue between the EBRD and the Ukrainian government started in 2007. Main efforts were made for developing and approving basic legislation jointly with the parliament, Cabinet of Ministers, business, IFIs, donors and other stakeholders. This coincided with hiring a full-time E2C2 expert in the Kiev Resident Office. In recent years, two more staff members (TC funded) joined the Kiev E2C2 team and together they are leading work on the ground and providing support and guidance to London-based colleagues. Having on-the-ground staff whose main task is policy dialogue and TC activities is enabling a much more consistent and comprehensive dialogue based on suggestions of local counterparts, the EBRD’s corporate policies and strategies, strategies and action plans of other donors and IFIs that are active in the area. Consistence and effectiveness of EBRD staff engagement at initial stage and following stages was remarked on by many counterparts in the government, IFIs and others.

At the initial stage of collaboration, while assisting with developing core legislation, the Parliamentary Power and Energy Complex Committee was a key counterpart and this intensive period of consultations lasted from 2007 to 2009. The milestone for this period was approval of Law on Changes to Law of Ukraine on Electric Energy for Stimulating the Use of Alternative Energy Sources in April 2009 which was brief and general and required a great deal of secondary legislation and regulations to be developed by the regulator. Further actions of the EBRD in the sphere were guided by the “gaps” in the adopted legislation as well as non-existence of practical regulations and guidelines. Dialogue was often launched on the request of the beneficiary involving other IFIs/donors (for example by the Ministry of Regional Development, Construction and Communal Services).

In the timeline of this case we are considering policy dialogue from 2009 when the Sustainable Energy Action Plan was signed between the head of the Resident Office and Vice Prime Minister of Ukraine stipulating areas where the EBRD would be providing investments, TC and advisory support. Implementation of the plan started with development and launching of number of TC projects and financial facilities, mostly jointly with other IFIs and international financial frameworks including the Clean Technology Fund, Global Environmental Facility and the Eastern Europe Energy Efficiency and Environmental Partnership (E5P).

The EBRD has chosen a consultative approach for stipulating objectives, resources and selecting consultants necessary for execution of specific policy-related tasks. As a rule, terms of references of TC projects were developed jointly with the key beneficiaries which they greatly appreciated. Some key government beneficiaries highlighted this inclusive approach as a very positive feature of the EBRD’s approach that distinguishes it from other IFIs and donors and provides opportunity for real partnership relationships.

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## 3.2 Carrying out the policy dialogue

While carrying out policy dialogue it is crucial to realistically assess the quality of human capital and institutional capacity. Multiple sources confirmed to the evaluation that the level of technical expertise and organisational capacity of main counterparts in the area of E2C2 and renewable energy are sometimes inadequate and that this is often the cause of low quality outcomes and inability to follow the high standards and rules that were developed with support from international counterparts.

It is not only that the capacity is lacking – it is the frequency of movement of top to middle tier personnel that is disrupting the process of change. If people remained in their posts for longer, it would be possible to build their capacity through long-term and varied types of engagement, trainings and consultations. Not only do personnel change frequently, officials are often posted to positions for which they do not have a relevant professional background and without relevant sector experience. Capacity is a critical handicap for changing and implementing policy. Moreover, they are often implementing the tasks that have very little in common with the official policy messages.

Some stakeholders were referring to the destructive role of the leadership of State Energy Efficiency Agency who is openly undermining some sectors of renewable energy in order to increase the competitiveness of others, controlled by strong and powerful economic groups.<sup>18</sup> For the last several years the sector of biomass energy was a hostage of hidden from the public eye political games. They are targeted at containing the development of this sector through legal terms used in the framework Law (barring 4/5 of potential energy sources); strict local content demands (sometimes unachievable due to lack of local production); and an open public relations campaign that presents biomass generating facilities as highly polluting and dangerous for surrounding area and livelihoods (there were facts of use of falsified evidence against biomass energy generation equipment). The Association of Local Producers of Biomass Energy also remarked on the destructive advice and messages of some IFIs which have strict principles about use of biomass resources determined by sustainability objectives (control over expansion of biofuel crops in order to protect food crops across the world). This adds to the restrictions of the sector as IFI opinion is highly valued by the government (in the opinion of private sector operators).

It is generally accepted that having a champion with the motivation and power to bring about a change to policy, and the will to carry it out is essential to achieve meaningful reforms. However, as is so often the case in Ukraine, the motivation and interests of decision makers are frequently different from those that would benefit the country as a whole, and this reality is generally hidden from the eyes of the international community, or perhaps they recognise its existence but choose to ignore it because it is “inconvenient” to their agenda. Vested interests are extremely strong in E2C2/renewable energy sphere as most of the mitigation and abatement is to be done in the industry, energy sector and municipal utilities – sectors dominated by a few large economic groups with considerable political lobby power at different tiers.

The situation with green tariff legislation which led to monopolisation of solar energy market and to some extent the wind energy sector is a very good illustration of skewing “the new reality” developed with the support from IFIs and the EBRD to serve the interest of big economic groups. Andriy Kluyev (former Vice Prime Minister responsible for Energy sector and currently head of Security Council) and his business group have managed to use legislation to obtain unique benefits from state budget while simultaneously

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<sup>18</sup> Similar but milder remarks were made towards the management of NERC, national regulator of electricity market

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cutting off potential competitors from the solar segment.<sup>19</sup> Renat Akhmetov, while not having the total control over the wind energy segment, owns a substantial part. Through powerful parliamentary and government lobbyists this group is restraining the development of other parts of the renewable energy sector, such as biomass, which potentially might endanger their position due to limitations of transmission network capacity and in more distant future – competition from cheaper and widely available energy source.

Another important element is the nature of personality – building relations with the stakeholders requires time, empathy and relevant skills. Ukrainian partners usually need to be assured that their international partners are suitably qualified and have good understanding of the local conditions. Otherwise they will be reluctant to trust the partners, leading to all sorts of complications on different stages of policy dialogue. Conversations with many stakeholders in Ukraine proved that there is a strong commitment and expressions of personal empathy and understanding that makes communication with EBRD counterparts productive and constructive. E2C2 team members, especially Sergiy Maslichenko, have been working at the Resident Office for many years and developed invaluable network of connections with mid-level managers and experts who are often instrumental in taking decisions at high level. Also E2C2 team members from headquarters have a very good and consistent record of engagement with Ukrainian counterparts. In fact their institutional memory in many cases supersedes that of Ukrainian actors who might change frequently. This is important for long-term activities and initiatives (such as preparation of Ukraine Energy Strategy [in E2C2 part], development of carbon trading mechanisms and regulatory support to NERC) where the timeframe goes beyond the tenure of Ukrainian officials. Also project consultants change as TC projects are going through their life cycle. E2C2 team is a crucial element of institutional and contextual memory and serves as invaluable source of expertise and advice for many (who acknowledged it).

Table 2 shows the main policy actors that are involved in E2C2/renewable energy policy dialogue. Figure 1 above shows how the EBRD's initiatives are fitting into the existing institutional system, and how different TC projects are being implemented at different points of a vertical decision making system. In the absence of one strong institutional player responsible for coordinating the efforts in E2C2/renewable energy, it is difficult for the EBRD to conduct a coherent and joined-up policy dialogue. Rather, by necessity, it is dealing with largely disconnected parts of a whole. Some parts of the system produce more tangible results than others. Those closest to the operational side generally perform better. For example, work with NERC on alternative energy market regulations and green tariffs is successful and highly visible while collaboration with the State Energy Investment Agency on carbon trading mechanisms is less so.

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19 Solar energy tariff is 11 times higher than average electricity tariff on the market, opposite to the wind and biomass tariffs which are roughly 3 times higher than average tariff – NERC data for January 2014

**Table 2: Principal actors in E2C2/renewable energy sphere in Ukraine**

<b>Ukrainian government</b>	<b>Private Sector/Publicly owned companies</b>	<b>IFIs/donors</b>	<b>Expert and analytical organisations</b>
Ministry of Environment and Natural Resources	Ukrenergo,	The EBRD,	International Energy Agency,
Ministry of Power And Coal Industry	Ukrhydropower,	World Bank,	OECD
Ministry of Regional Development, Construction and Communal Services	USELF clients,	IFC,	
Ministry of Social Policy	Clients of Ukraine's SEI programme.	EU (including Neighbourhood Investment Facility),	
Ministry of Economic Development and Trade		UNDP, UNFCCC and other UN institutions/frameworks	
Ministry of Finance		E5P,	
Ministry of Justice		CTF,	
Parliament (in particular Power and Energy Complex Committee)		GEF,	
National Energy Regulatory Commission (NERC)		USAID,	
National Agency of Energy Efficiency		The Nordic Environment Finance Corporation (NEFCO),	
State Environmental Investment Agency		KfW,	
		NIB,	
		GIZ,	
		Others	

Specific policy dialogue initiatives in the E2C2/renewable energy sphere currently include<sup>20</sup>:

- Assisting the National Electricity Regulatory Commission to further develop a regulatory framework for renewable energy;
- Carrying out a Strategic Environmental Review focusing on wind, small hydro and solar technologies;
- Assisting the Ministry of Regional Development, Construction, Housing and Communal Services to examine issues related to legal and regulatory frameworks and to raise general awareness about capacity and low penetration of energy efficiency technologies;
- Designing and implementing a pilot project in the city of Dnipropetrovsk to develop the Energy Service Company (ESCO) contracts market to improve energy efficiency of public buildings.

Some of these are already successful while others are yet to bear fruit. For example, EBRD work in the residential buildings sector is a very comprehensive activity with high potential for development of investment projects in the future. On the other hand, it is a difficult area given legacy issues, and it involves coordination with many other IFIs and donors (including IFC, NEFCO, KfW, the European Commission (EC), USAID, UNDP). Policy dialogue in the renewables sub-sector on the other hand has produced more early results embedded in legislation, regulations and status of state regulator – that are

<sup>20</sup> Based on Sustainable Energy Initiative in Ukraine Factsheet, EBRD October 2013

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benefiting implementation of existing projects and generating pipeline of new ones. At the same time difficulties and handicaps exist in this sector as well (see above).

Usually, the EBRD performs policy dialogue in close partnership with other IFIs and donors, especially the World Bank, the EU, USAID, SIDA and others. The EBRD is managing several international/global financial facilities in Ukraine including E5P, Neighbourhood Investment Facility (by EU), CTF, GEF and others and thus maintains in-depth dialogue and co-ordination with contributing organisations and government agencies. Talking with a unified voice on important issues and reforms that need to be performed helps to strengthen the commitment of Ukrainian counterparts who previously were able to play on differences of donors' opinions and priorities (a good example is donor co-ordination in the sub-sector of energy efficiency of residential buildings where progress in the dialogue was achieved after donors and IFIs came together and started talking as a unified voice). Now the government needs to talk to a group of likeminded organisations that have similar priorities and requests. Renewables and energy efficiency in buildings and utilities sector have quite well-formed donor coordination mechanisms that are sometimes led or actively steered by Ukrainian government counterparts. In the climate change area, coordination was less visible also due to the fragmentation of the institutional architecture.

In many instances, the EBRD is taking part in wider coalitions and it conducts dialogue via public events and gatherings of representatives of the private sector, government and CSOs. Taking part in regular forums and conferences in the E2C2 sphere contributes towards delivering corporate messages, disseminates information about achieved results and planned projects, "telling the stories" of success and challenges, and generating interest from potential investors.

Engagement with civil society in the E2C2/renewables sphere is not always smooth. While there is productive dialogue with the professional networks and business lobby groups (associations), relationships with campaigners and pressure groups are less agreeable and the EBRD is often criticised for its approach to energy efficiency and climate change in the wider context of its in-country operations. Although criticisms are often made about the EBRD's investments in nuclear safety or conventional energy generation, renewable energy projects also attract negative comment due to protests by local communities and cases formulated by environmental protection groups.

Pre-emptive dialogue with CSOs in environmental sphere, and possibly engaging them through partnership accords similar to the ones launched by the World Bank and some other IFIs in Ukraine and elsewhere (see Box 2) might become a useful tool for engaging civil society in the dialogue and providing solutions that are acceptable not only for private sector but also for local communities.

#### **Box 2: Partnership between IFI and CSOs in Ukraine**

In January 2013, the World Bank (WB) office in Ukraine and the International Renaissance Foundation (IRF) office in Ukraine signed a Memorandum of Understanding on carrying out joint activities aimed at supporting CSOs in monitoring the range and the quality of municipal services provided to local communities. The agreement is intended to strengthen the community control over vital services provided at the local level, and to complement investment activities of the Bank that provide loans to municipal utilities companies across Ukraine for modernising infrastructure, management and service delivery. More information about the Memorandum and joint WB/IRF activities could be found following the link.

[http://www.irf.ua/files/ukr/programs/civsoc/wb\\_irf\\_mou\\_january\\_22\\_2013.pdf](http://www.irf.ua/files/ukr/programs/civsoc/wb_irf_mou_january_22_2013.pdf)

While recognising the time and resource constraints faced by the EBRD, greater engagement with Ukrainian CSOs could pay dividends. An option could be to identify a core group of organisations willing to engage with the Bank in a constructive policy dialogue. Such engagement could facilitate mediation

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between local communities, the private sector and international players in the process of planning and implementing investment projects supported by the EBRD and other IFIs.

As part of a wider outreach strategy and as used by some other teams, storytelling (namely using real case study examples that illustrate what's involved and when, how and by whom benefits are derived) could usefully be a significant element of a strategy of engagement. Emulating some other teams, the E2C2 team could use a wider range platforms and fora to deliver policy messages which are based on very practical and mostly successful experience of delivering transformational opportunities to the industries and communities of Ukraine.

Aetailed timeline of the activities and actors who carried out policy dialogue in energy efficiency and climate change sector is presented in Annex 2 of this report.

### 3.3 Achieving results

Policy dialogue in E2C2 and renewable energy has often but not always led to investment operations. When it has, there have been very tangible outcomes in terms of energy and cost savings and emission reduction (see SEI outcomes). Where policy dialogue is long-term and leads to changes in legislation, regulations, institutions and skills (such as policy dialogue in climate change sphere), results are measured in terms of outputs such as an improved legal base, financial and institutional mechanisms that will facilitate a future energy efficiency programme, producing outcomes and impacts across the economy.

It was highlighted that E2C2/renewables policy dialogue should be more focused and there are calls for it to be more result-oriented, even when delivering forward-looking initiatives. This will make it easier to attract resources for further initiatives. The E2C2 team is planning to formalise the prioritisation of policy dialogue work through taking a business case on this to the EBRD's Strategy and Policy Committee.

Factors associated with successful and efficient policy dialogue were identified in this case as:

- Good preparatory work – thorough drafting of terms of references in close collaboration with the beneficiary;
- Continuous communications with the beneficiary – listening and hearing what they are saying;
- A meticulous process for selecting the right consultants for the specific task, preferably with a strong local presence and understanding of the Ukrainian context;
- Policy dialogue is important for supporting policy implementation – this may involve helping with fine tuning the policy/legislation, helping prevent reversal of the policy or its subversion or co-option by a narrow self-interested group. Those consulted pointed to the benefits that flow from having the same consultants involved in development and implementation stages.

It is interesting to look at the mechanisms of policy dialogue and TC projects separately for energy efficiency and climate change sectors, as they offer different models and also they were led by different teams – E2C2 and OCE respectively (though in close collaboration with the other team and banking). They also served different purposes and delivered different results that were (and are) used not only by Ukrainian counterparts but also by the international community.

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### 3.3.1 *Energy efficiency*

Policy dialogue in the energy efficiency sector is active from both the production (energy generation) and consumption side (buildings and utilities). Because it is such a new area of policy in Ukraine, many EBRD investment operations in the sector are becoming learning and demonstration cases. They are used for demonstrating costs and benefits, and to identify the need for new or amended legislation, regulations and institutions that are needed in order to replicate the experience. They are also used for learning in terms of defining good or best practice. Examples include a project on biogas generation funded via USELF and the Dnipropetrovsk ESCO project. The EBRD is using existing imperfect legislation, or even a lack of it, to build the case for change through example. Such “learning by doing” is a very good illustration of the EBRD’s flexible approach and its ability to dedicate resources to conceptual and practical elements of the reforms at the same time.

The experience of the E2C2 team has shown that some notions and terms simply do not exist in Ukrainian legislation or the Ukrainian way of thinking. For example, risk sharing for energy performance contracts is not covered or widely understood. That is why the EBRD needs to be creative by use the existing context to construct the environment for the pilot and through its (hopefully) successful implementation to prove the need for legal, regulatory, institutional changes and the need for capacity building that would incorporate the new terms and *modus operandi* in the routine operations of the sector.

Many complemented the EBRD’s distinctive approach to legal work. Drafting legislation is an important part of policy dialogue in this case. The way legislation is drafted, agreed, approved and, most importantly, implemented, will determine whether the desired reforms are actually put into effect and how attractive the new environment proves to be for investors – domestic and foreign. Policies, legislation and regulations must actually be introduced and operate in a consistent and transparent manner if the desired results are to be potentially achieved. Then, those expected to take action need to do so if the desired results are to be actually achieved.

The starting point is to have new policies, laws and regulations that have the support of those expected to implement it. The case shows that the EBRD has been consistent in its approach of ensuring that legislation and regulation is drafted jointly with the government, rather than having consultants prepare it in isolation with the final product just presented to the client. The approach adopted by the E2C2 team has produced early stage buy-in and higher degree of understanding that reduced complications at both approval and implementation stages. The evaluation noted that both in this case and others other IFIs and donors do not always follow the same practice. Some interviewees shared their view that the EBRD’s legal products are of a better quality and are more implementable and sustainable than those delivered by some other international organisations and IFIs.

Another benefit of the joint approach (between the EBRD and Ukrainian government) to legislation and regulation development is that capacity and ownership is built into the ministries and agencies.

So far the approach has been successful in:

- Developing energy efficiency norms and regulations in the construction industry – the EBRD’s assistance was instrumental in drafting crucial secondary legislation and regulations;
- Preparation of the amendments to the Budget Code, Tax Code, public procurement legislation and other legal acts to enable introduction of contracts with Energy Service Companies (ESCO);
- Drafting changes to legislation in the electricity sector that strengthen the role of the independent regulator and creates the basis for generating and transmitting electricity from

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renewable energy sources (some negative consequences of this legislation should be noted, especially related to local content issue and transmission capacity allocation to renewable energy producers).

### 3.3.2 *Climate change*

Climate change is the area where stand-alone policy dialogue between the EBRD and the Ukrainian government (mainly the State Environmental Investment Agency as the government policy actor) took place for several years. However, this was not pursued further due to the Board decision to concentrate on other priorities. The work was led by OCE team in collaboration with the E2C2 team.

A key stakeholder highlighted that the government was very interested in the work done by the EBRD in the framework of two TC projects. However, it was very challenging to get Board approval for both of those projects and after their completion it was recommended that other international organisations or funds should sponsor this type of activity as it does not form part of the mainstream EBRD priorities for the E2C2 sphere.

The result of one of TC projects, “Marginal abatement costs study” (2010-2012) funded by the EBRD Shareholder Special Fund, was the preparation of a substantial study on various scenarios of policy measures and financial instruments with the calculations of their cost for the investors – “An Investor’s Marginal Abatement Cost Curve for Ukraine”. The study looked at the effectiveness of different policies on climate change mitigation and cost distribution, and at a wider economic impact of these policy mixes. As a result, it produced a solid piece of evidence about various scenarios for investment in reducing greenhouse gas emissions which was highly appreciated by both the Ukrainian government and the European Union. Consequently, it contributed to finalisation of the negotiations between the government and the European Commission on the second round of Kyoto protocol commitments.

Before the analysis was prepared, the European Commission had serious doubts about the validity of information and data related to Ukraine’s different scenarios for reducing emissions in the framework of Kyoto Protocol commitments and the demands for reduction were much higher. Thanks to the EBRD and its consultants, the EU received reliable and objective analysis of various scenarios – a piece of evidence that was crucial for completing negotiations. On the one hand, the Ukrainian government was convinced of the need to sign the second round of Kyoto commitments and on the other hand, the EU was persuaded to take a softer approach with regard to emissions reduction requirements.

The EBRD’s work on helping Ukraine to support national emission trading schemes with the aim of opening the European market and other international emission trading markets for Ukraine (PETER Project) was less successful. After a UNFCCC meeting in Doha the Ukrainian government dropped the law on emission trading and started to think afresh what instruments should be used in this area (such as carbon tax).

Focused and result-oriented policy dialogue is important for the Bank and its clients. And while it is more difficult to achieve for standalone initiatives and TC projects, the shorter the gap between the policy intervention and delivery of the successful investment operation is, the more visibility there is, and the easier it is to argue for continued financial and other support to policy dialogue activities. An effective communication strategy with the use of instruments of various “accessibility”, including story-telling for the wider groups of stakeholders might increase the visibility of results achieved and enhance chances for securing further funding.

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### 3.4 Reviewing, reporting and evaluation

The E2C2 team provided the evaluation team with an extensive package of background reports and other documents, which were very useful. These documents also revealed quite a lot about the nature of reporting in the E2C2 area, which, while good in some respects, could be improved in other respects, for example consistency of data in different databases (budgets differ), availability of crucial documents in the EBRD database (such as a Memorandum of Understanding on SEAP signed in 2009).

This problem is not exclusive to E2C2 – the process of preparing each case study revealed the universal nature of this challenge. There is significant scope for improving the way in which information on policy dialogue is stored, processed and used – the way in which knowledge is managed for learning and stock-taking of past experience.

Due to the global and significant cross-sector nature of E2C2 work there is more data available for analysis, and further effort is being made to enhance it.<sup>21</sup> It will potentially enable a more consistent and continuous monitoring of the developments in the sector and reporting on the progress against set objectives. It may have a positive impact on internal standards of reporting on investment activities and TC which currently suffer pitfalls of some information being inaccessible or difficult to interpret. That should improve presentation of the achievements and impact they had on local context not only from a short-term perspective but also in the mid-term and hopefully long-term timeframes.

### 3.5 Resourcing

The EBRD's activities in the E2C2 and renewables sphere are largely well resourced. Access to various global and bilateral funds enables delivery of much needed forward-looking and market-opening TC projects and policy dialogue initiatives. It enables not only funding of consultants, but also provides fee income for some staff members in E2C2 team – both in Resident Offices and Headquarters.

Below we analyse use of resources along three strands: E2C2 team, other EBRD teams and consultants.

#### 3.5.1 E2C2 Team

The E2C2 team consisting of about 30 highly qualified professionals is one of the best equipped teams in the Bank for performing policy dialogue and providing TC. It has access to various global and international financial instruments and facilities, and is the centre of many well co-ordinated initiatives jointly with other IFIs and donors.

At the same time, there are issues related to resource allocation and maintaining high quality human capital of the country-based team. Kiev E2C2 team consists of three staff members including an engineer is strong and recognised by a majority of stakeholders as an invaluable asset of the EBRD in Ukraine. At the same time, its composition is not stable as one or more of the crucial positions are temporary as they are funded via GEF. When the fixed-term funding is finished the progress in one of the sectors (energy efficiency in residential and public buildings) might be in danger.

The in-country location of the E2C2 team is crucial – there were many occasions at interview stage of this evaluation study when counterparts highly praised the quality and effectiveness of advice and inputs provided by Kiev-based E2C2 experts and excellent collaboration with London Headquarters colleagues who are visiting country on the regular basis and provide valuable input. Flexibility in approach, on-the-

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<sup>21</sup> See earlier mentioned initiative of five multi-lateral development banks on unifying the approach to reporting on climate financing initiatives managed by the EBRD's E2C2 team.

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ground knowledge and the ability to talk to movers and shakers, sometime non-officially, helps to resolve some issues and promote others.

The E2C2 team status in the Bank is unique. Its track record since its inception in 2006 is impressive and its unique local knowledge and understanding of local context, and extent of partnership network is highly esteemed. Forward-looking TC projects and policy dialogue are working well and are leading to investment operations, if not immediately, then almost certainly in the medium term. This experience could be used for other strategic areas of the EBRD's work such as investment climate, agribusiness.

### 3.5.2 *Consultants*

Use of consultants is an important source of flexibly available, leading expertise. Clearly, consultants can dedicate far more time to a particular set of tasks, and on a continuous basis, than would be possible relying on staff time alone. The use of consultants is seen as bringing relevant skills and experience from other countries and their integration within the host department is strongly acknowledged as contributing to capacity development and creating ownership of TC outputs. Meanwhile, the E2C2 team retains the functions of project management, client communication and quality control. Making use of consultants in the most effective way is the question universally crucial for all cases of policy dialogue studied by the evaluation.

An example of successful use of consultants is that provided to support to the regulator, NERC. The client appreciated the participative way in which consultants were selected for the UDERLF Regulatory Support Programme (Mercados)<sup>22</sup> and the contribution they made to producing results and building institutional capacity. On the other hand, especially where legislation and regulations are changed for the purposes of opening markets for alternative energy generation facilities, use of consultants is not so straight-forward.

Some interviewees commented that there is a risk that EBRD advice and that of other IFIs could lead to creation of a distorted market. A case in point might be the solar energy market where 95 per cent of all generating capacity belongs to one economic group.<sup>23</sup> The EBRD's consultants designed the tariff regulations that inadvertently contributed to dramatic market distortions and high market entry barriers that benefit one oligarch-controlled economic group. The task of drafting a specific piece of regulation that was not in initial project terms of reference was added at the government's request, without much investigation of the details or long-term consequences. Without knowing the hidden agendas and vested interests pursued by certain officials it was difficult to predict that amendments would distort the markets so significantly. On recognising what had happened, the EBRD was forced to withdraw from any further work in this area until the situation improves.

The only way to diversify and open up the market in the current situation in the opinion of some stakeholders is to (yet again) use the leverage of IFIs or alternatively small investment projects, which are gradually entering and testing the market in the hope of contributing to evolutionary change.<sup>24</sup> In a way, the advice and expertise provided by the EBRD's consultants led to creation of a duopoly in the solar energy market – one oligarchic economic group and IFIs. USELF so far is the only financial facility of IFIs that is providing funds to small-scale renewable energy generation projects in Ukraine. Despite the availability of US\$250 million in Ukraine's Clean Technology Fund only US\$50 million has been used by the EBRD while other IFIs are still considering their options in the sector.

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22 UDERLF is the old name of existing USELF programme

23 This group is led by Andriy Kliuyev, Former Vice Prime Minister responsible for energy sector

24 A small-scale solar project approved in 2013 in the framework of USELF and is managed by PEU team is an example of this.

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Based on this experience, the recommendation for the future is for the EBRD to bring more political economy expertise to bear on its work and to closely manage its consultants, so that their activities do not inadvertently lead to controversial situations similar to what happened with the green tariff legislation and regulations where well-meaning and technically sound advice was taken advantage of by an elite. This will require a high degree of political awareness and more hands-on monitoring and agility to take corrective actions if needed.

### 3.5.3 *Conclusions*

- i) Policy dialogue by the EBRD in energy efficiency, climate change and renewable energy has made substantial progress and significant results have been achieved. The Bank is one of the most respected and appreciated international players in the area, ones whose policy advice and calls for reform go hand in hand with substantial investment across multiple sectors. Its success is due to: the right combination of skills blending both in-house expertise with that of consultants; knowledge of the local context and proximity to domestic policy actors (presence on the ground); availability of resources and willingness to commit to standalone TC projects and transactional TC associated with large and small-scale investment projects; and, strong coordination mechanisms with other IFIs and donors working in the same area.
- ii) Creation of the unique structure of the E2C2 team within the EBRD was possible due to the global nature of the issue. It was meeting the need for the EBRD to be seen as responding in a substantial way to climate change challenges and being capable of doing so. Notwithstanding the unique circumstances leading to its creation, it does provide an example of an alternative institutional arrangement for policy dialogue that other teams could draw on with customisation to their own circumstances.
- iii) The power of policy to create enabling conditions for investment allowed a successful business case to be formulated for appointing one and then a second policy specialist to the E2C2 team. The team has both technical and generic skills that make it a very good partner for other banking teams and specialist teams such as OCE and the Legal Transition Team. It also uses consultants to do the detailed work and that which allows for constant engagement with the client.
- iv) Combining policy dialogue and promotion of investments in the same team does have the potential for conflict of interest but in the view of the evaluation, this has not yet emerged as a problem. However, this does not mean the Bank should be complacent – some checks on the validity of the policy messages are needed.
- v) EBRD work in the legal sector is exemplar and worth spreading across other sectors and possibly other IFIs (as noted by those). It demonstrates an inclusive approach when engaging beneficiaries from the start in the process of developing new legislation and regulations, along with highly qualified consultants and EBRD experts. The work ensures capacity for further refinement of legislation and its implementation and monitoring. The extension of policy dialogue and TC projects to the implementation stage of some activities is advisable in order to create a truly sustainable and resilient mechanism fully integrated in the government structures and decision making process.
- vi) Certain legal terms and instruments necessary for enhancing energy efficiency of the economy are absent in Ukrainian legislation. This consequently requires a creative and

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flexible approach to investment operations, which is however rooted in strict principles and conditions ensuring targeted final outcomes. The EBRD is championing investments in some “unchartered waters” by applying “experimental models” based on existing legislation. Close linkages between investment operations, policy dialogue and supportive TCs is a must.

- vii) Coordination with the Legal Transition Team works well, that with OCE less well.
- viii) As noticed in other areas of EBRD operations in Ukraine, policy dialogue work lacks visibility and consequently, it is sometimes challenging to prioritise it. Staff members need a bit more encouragement and recognition for achievements in the area, even if tangible results measured by millions of investments are immediately forthcoming.
- ix) The impact of legal and regulatory changes, enhanced capacity and invested funds is significant and allows Ukraine to save millions of euros on energy bills and to reduce its greenhouse emissions. Slow changes are being observed in the behaviour of companies, mostly private, while publicly controlled utilities are making the first important steps in improving their equipment which is responsible for wasting up to 60 per cent of energy. Further large-scale education campaigns are needed to achieve really significant energy saving as a result of the measures being introduced by businesses and the public sector. It is a task not for one IFI but for a wide coalition of IFIs and donors many of whom have energy efficiency and renewable energy as a priority of their work in Ukraine.
- x) This case offers some important lessons and possible models regarding resource allocation; balance between proactive forward-looking and reactive problem-solving policy dialogue. It illustrates some opportunities for improvement, especially in the sphere of managing consultants' work; being more politically aware and astute (requiring political economy skills) to be more alert to the potential for policy capture, reversal or subversion such that preventative actions can be taken; and improved outreach and engagement with CSOs and pressure groups. Donor co-ordination is strong, rooted in the global nature of the challenges and availability of various international legal frameworks and financial facilities. It is playing a crucial role in achieving results in specific areas; however more efforts are needed for agreeing priorities and for helping Ukrainian government in creating clearly-prioritised and widely agreed strategic framework for energy efficiency encompassing all sectors of economic and human activities.
- xi) The EBRD has a good set of skills and instruments for operating in imperfect and fluid institutional and legal environment, like Ukraine's E2C2/renewables sphere. It requires more skills and knowledge for understanding, pre-empting and neutralising the hidden agendas and vested interests which are wide-spread and causing distortions on otherwise highly competitive and attractive markets. It requires both stock-taking of past experience, including on other countries of operations with similar context, and forecasting the developments in the area.
- xii) Communicating the EBRD's achievements is as important as in any other sector. Combined with a sense of empathy and understanding of Ukrainian challenges it could enhance the EBRD's position in the sphere even further.

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[Ukraine Energy Efficiency Programme](#), European Bank for Reconstruction & Development

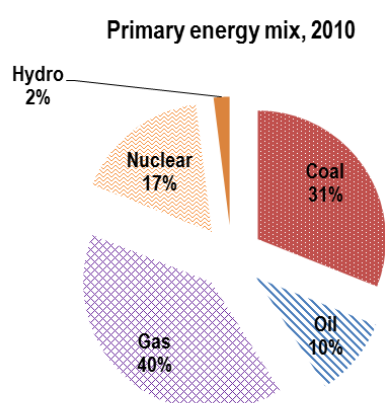
[IFC Ukraine Residential Energy Efficiency Project](#), International Finance Corporation 2014

## Annex 1: Facts and figures about energy efficiency policy and practices in Ukraine

Although Ukraine made progress in terms of energy efficiency and some of its most energy intensive industries closed in the 1990s, it remains one of the most energy-intensive countries in the world. This is mainly due to Ukraine's high concentration of energy-intensive sectors, outdated industrial processes and equipment, inefficient district heating systems and poor quality building stock. Ukraine has nevertheless indicated a strong commitment to work towards increased energy efficiency and savings. Improving efficiency would contribute to energy security and climate change mitigation by reducing greenhouse-gas emissions. Moreover, energy efficiency improvements are essential to secure competitiveness of Ukraine's industrial sector.

### 1. Energy production and use

The country's primary energy supply comes from uranium and coal resources. Natural gas also plays an important role in Ukraine's primary energy mix. In 2010, Hydro contributed only two per cent to Ukraine's total primary energy supply. Other renewable energy sources amount for a marginal supply of Ukraine's total primary energy supply.



Source: Naftogaz

The potential of Ukraine in renewable energy sources is showed in the table below according to the Institute for Renewable Energy in Kiev.

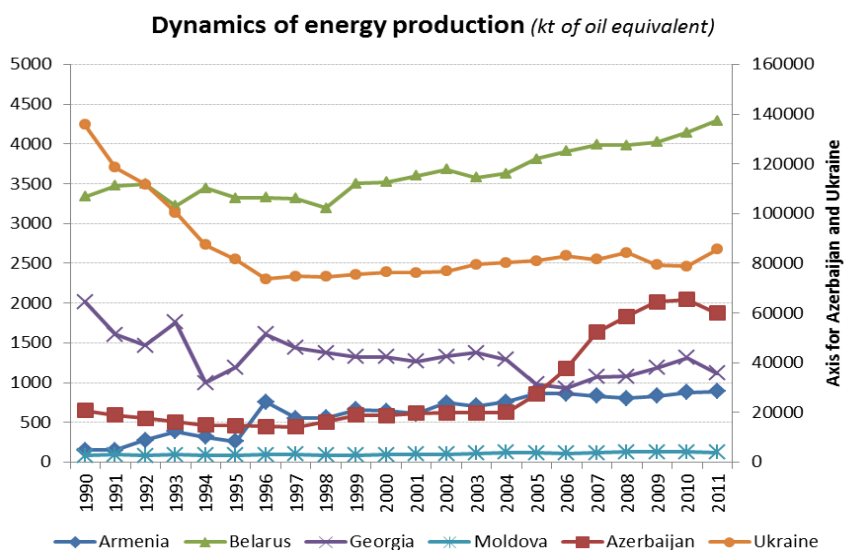
	Annual technical potential		Annual volumes of substituting for natural gas
	Bln.kW*hour	mil. t.c.e	bln. m3
Wind power	41.7	21	18.04
Solar Energy	28.8	6	5.22
Geothermal	105.1	12	10.43
Hydro	27.7	10	8.7
Bioenergy	162.8	20	17.4
Energy of environment	154.7	18	15.65
<b>Total Renewable Energy Sources</b>	<b>520.8</b>	<b>87</b>	<b>75.65</b>

Source: Institute for Renewable Energy, [www.ive.org.ua](http://www.ive.org.ua)

Ukraine's goal is to reach 11 per cent of renewable energy of the country's energy mix by 2020. The EBRD is supporting this goal with two main projects:

- Establishment of the €50 million Ukraine Sustainable Energy Lending Facility<sup>25</sup> also supported by €20 million of concessional funding from the Clean Technology Fund (CTF) and €5.7 million contribution from the GEF.
- €4.1 million loan agreement signed with Green Agro Service in 2012 under the USELF framework with an additional funding of €1.6 million of long term finance provided by the CTF.

The graph below illustrates the evolution of energy production in Eastern Partner countries.<sup>26</sup> Ukraine (right axis) is the largest energy producer among its peers.



Source: Data from the World Bank

The energy intensity of Ukraine is approximately three times higher than that of the EU<sup>27</sup>. This means that Ukrainian companies use on average three times the energy needed by their counterparts of the European Union to produce the same level of output. The potential for energy efficiency improvements in Ukraine is therefore huge despite the country's low energy prices relative to the EU.

Ukraine energy use<sup>28</sup> has decreased since 1990 but remains one of the highest of Eastern Partner countries as illustrated in the chart below.<sup>29</sup>

The indicator of GDP per unit of energy use is the PPP GDP<sup>30</sup> per kilogram of oil equivalent of energy use. Over the last 21 years this indicator reached a maximum value of 2.3 in 2008, 2009 and 2011; and a minimum value of 1.2 in 1995.

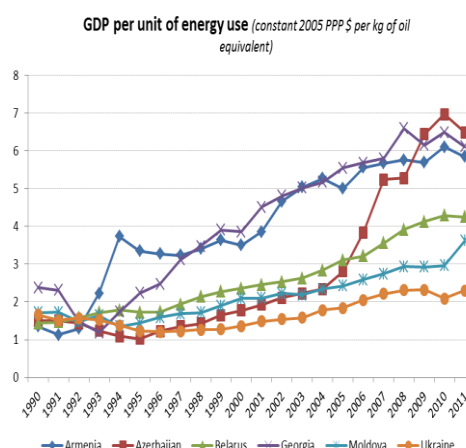
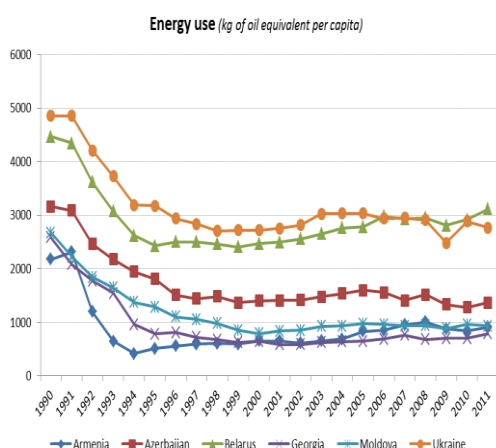
<sup>25</sup> More information is provided about the Sustainable Energy Facility at the end of this addendum.

<sup>26</sup> Energy production refers to forms of primary energy—petroleum (crude oil, natural gas liquids, and oil from nonconventional sources), natural gas, solid fuels (coal, lignite, and other derived fuels), and combustible renewables and waste—and primary electricity, all converted into oil equivalents.

<sup>27</sup> Ukraine Energy Efficiency Programme [www.ukeep.com](http://www.ukeep.com)

<sup>28</sup> Energy use refers to use of primary energy before transformation to other end-use fuels

<sup>29</sup> Energy use is equal to indigenous production plus imports and stock changes, minus exports and fuels supplied to ships and aircraft engaged in international transport.



Source: Data from the World Bank

In 2010, Ukraine's total primary energy supply was 130.5 million tons of oil equivalent, as shown in the table below. This represents a 0.9 per cent decline from 2000. Ukraine is a major coal producer and ranked 13th worldwide in 2010.

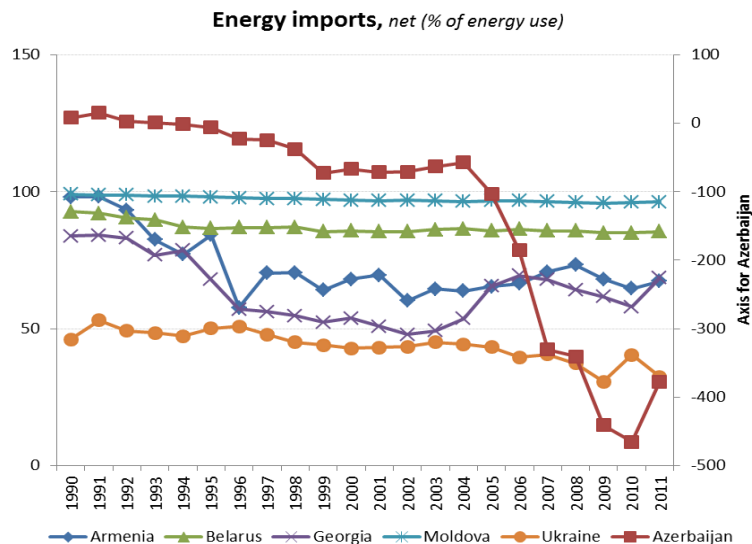
	Production (Mtoe) <sup>31</sup>				TPES/capita (toe/capita)	CO <sub>2</sub> from fuel combustion (Mt CO <sub>2</sub> )
	Oil	Gas	Coal	TPES		
2010	3.6	15.4	31	130.5	2.84	266.59
Per cent change 2000-10	-3.2	2.9	-14.7	-0.9	6.2	-3.9
Per cent change of world in 2010	0.1	0.6	0.9	1		0.9
World ranking in 2010	50	30	13	18	44	131

## 2. Gas and oil importation and coal exportation

Net energy imports are estimated in terms of energy use less production, both measured in oil equivalents. A negative value indicates that the country is a net exporter. Energy use refers to the use of primary energy before transformation to end-use fuels. The value of energy use is equal to (i) indigenous production plus imports and stock changes, (ii) minus exports and fuels supplied to ships and aircraft engaged in international transport. Ukraine is a gas and oil importer.

30 PPP GDP is gross domestic product converted to current international dollars using purchasing power parity rates and an international dollar has the same purchasing power over GDP as a U.S. dollar has in the United States.

31 Mtoe= million tonnes of oil equivalent, TPES=primary energy supply including indigenous production and imports, minus exports and transfers between energy commodities; toe= tonne of oil equivalent, MT= million tonnes



### 3. GHG emissions

#### 3.1. General statistics

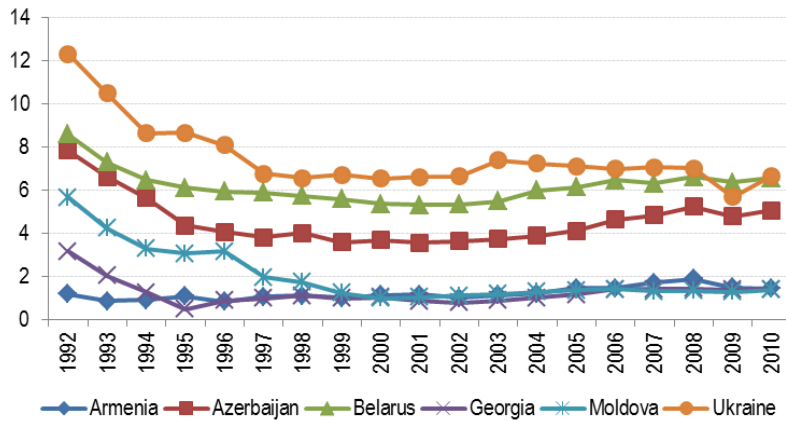
	Emissions, in Gg CO <sub>2</sub> equivalent		
	1990	2000	2011
CO <sub>2</sub> emissions without LULUCF <sup>32</sup>	718951.5	293541.7	305463.6
CO <sub>2</sub> net emissions/removals by LULUCF	-69757.5	-50854	-7291.1
CO <sub>2</sub> net emissions/removals with LULUCF	646194	242687.7	298172.5
GHG emissions without LULUCF	929893.6	395749.8	401576.3
GHG net emissions/removals by LULUCF	-69737.1	-50840.1	-7289.8
GHG net emissions/removals with LULUCF	86156.5	344909.6	394286.5

	Changes in emissions in per cent			Average annual growth rates, in per cent per year		
	1990 - 2000	2000 - 2011	1990-2011	1990 - 2000	2000-2011	1990 to 2011
CO <sub>2</sub> emissions without LULUCF	-59.2	4.1	-57.5	-8.6	0.4	-4
CO <sub>2</sub> net emissions/removals by LULUCF	-27.1	-85.7	-89.5	-3.1	-16.2	-10.2
CO <sub>2</sub> net emissions/removals with LULUCF	-62.6	22.9	-54.1	-9.4	1.9	-3.6
GHG emissions without LULUCF	-57.4	1.5	-56.8	-8.2	0.1	-3.9
GHG net emissions/removals by LULUCF	-27.1	-85.7	-89.5	-3.1	-16.2	-10.2
GHG net emissions/removals with LULUCF	-59.9	14.3	-54.2	-8.7	1.2	-3.6

<sup>32</sup> LULUCF= Land use, Land use change and forestry. This term is defined by the United Nations Climate Change Secretariat as a greenhouse gas inventory sector that covers emissions and removals of greenhouse gases resulted from direct human induced land use, land use change and forestry activities.

### 3.2. CO2 Emissions

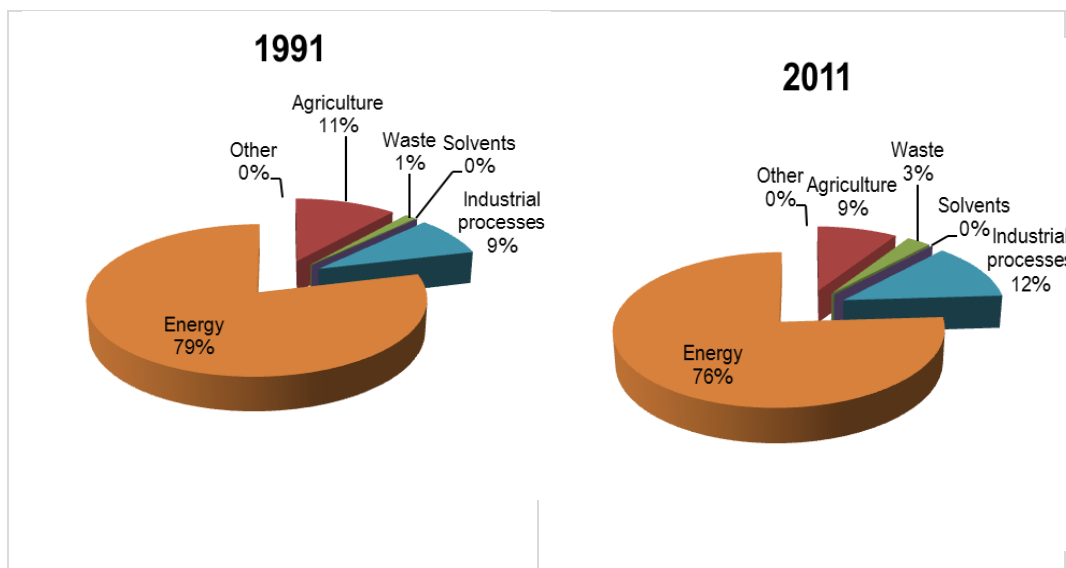
CO2 emissions (metric tons per capita)



Source: Data from the World Bank

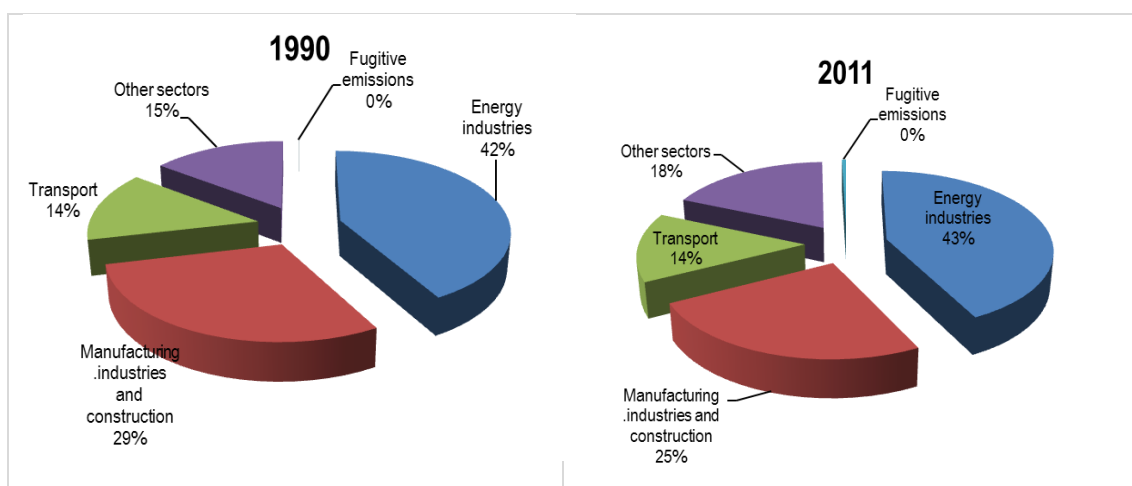
Carbon dioxide emissions in Ukraine reached 12.3 tons per capita in 1992. These CO2 emissions have generally decreased during the 1992-2010 period with a minimum value of 5.6 tons per capita in 2009.

### 3.3. GHG emissions by sector



Source: Data from the United Nations Climate Change Secretariat

### 3.4. Breakdown of GHG emissions within the industrial processes sector



Source: Data from the United Nations Climate Change Secretariat

## 4. Energy efficiency potential

The tables below illustrate the estimations of the economic potential for energy savings in five categories (family houses, apartment buildings, healthcare, education and other buildings) made by the Energy Community and the Energy Saving International AS. The calculations were based on reference buildings and the most cost effective energy saving measures for each category. There is an important potential for energy efficiency and savings in Ukraine, especially in the industry and residential sectors.

Table 3 Ukraine, Cost effective energy saving potential in five sectors

Sector	Rank	Measures	Building stock area (est) m <sup>2</sup>	Savings kWh/m <sup>2</sup> a	Savings €/m <sup>2</sup> a	Total savings %	Investment €/m
Family housing	1	Energy efficient lighting	565,371,500	115.9	1.9	37	26.0
Apartment buildings	1	Energy efficient lighting	501,263,000	97.2	3.2	45	30.3
Healthcare	1	Heat insulation of distribution pipes	22,470,000	75.2	4.2	32	45.3
Education	1	Heat insulation of distribution pipes	83,205,700	80.3	5.0	35	41.0
Other buildings	1	Energy efficient lighting	10,050,000	75.0	3.9	30	39.0

Source: Study on Energy Efficiency in Buildings in the Contracting Parties of the Energy Community-Final Report 24.02.2012

According to IFC<sup>33</sup>, the residential housing sector in Ukraine accounts for approximately 25 per cent of the country's total electricity use and 40 per cent of its heat energy resources. The residential housing sector represents one of the best opportunities for achieving energy savings and thus reducing the region's GHG emissions.

33 IFC Ukraine Residential Energy Efficiency Project

## Annex 2: Detailed policy dialogue timeline

	Policy problems/ opportunities/ proposed policy solutions	Ukraine actors	EBRD actors	Other actors	Inputs and Actions	Outputs	Outcomes
January 2009	<ul style="list-style-type: none"> <li>– Lack of predictable financial stimuli for investments in the renewable energy sector was a significant handicap to increasing financial flows in this sector.</li> <li>– Lack of proper legislative and regulatory base and institutional framework was undermining the potential development of the sector.</li> </ul>	Parliament of Ukraine, President of Ukraine - decision makers	E2C2 team - adviser, advocate, interested party	IFIs and Donors (including EU, WB, IFC) - advisers and advocates	The Law on Green Tariff is enacted (approved in September 2008 - Law on Amendments to certain legislation with regard to green tariff, No 601-VI). It was developed with the support from various IFIs, including the EBRD. The key agency responsible for its implementation is NERC.	The new law introduced economic instruments, fiscal/financial incentives and feed-in tariffs/ premiums for several sources of renewable energy: solar, wind, hydropower, bioenergy, biomass for power. It also introduced local content requirements for renewable energy production facilities (compulsory share of products and services produced in Ukraine in the total cost of the project).	Establishment of a green tariff and its 'fixation' for 30 years was a good incentive for domestic and international investors to launch new projects in renewable energy generation. Ukraine experienced dynamic growth in alternative energy production and currently it represents seven per cent of total energy production in Ukraine. Among others Ukraine built one of the biggest solar energy power stations in Europe (20 MWh). Competitiveness in these markets however remains questionable (especially in the solar and wind power sectors) due to high entry barriers encapsulated in further amendments to the law (see below).
June 2009	There was a need to strengthen the country's energy security, improve industrial competitiveness and reduce energy bills for Ukrainian people. Ukraine needs support from international partners, including IFIs, in implementing much needed reforms. The EBRD has been investing in a variety of energy efficiency projects across Ukraine since 2006 in the framework of Sustainable Energy Initiative (SEI).	Vice Prime Minister of Ukraine - decision maker	EBRD Board - decision maker, Head of Resident Office, E2C2 team - expert, adviser		The EBRD and the Ukrainian government have agreed on a Sustainable Energy Action Plan (SEAP) which outlines actions to promote the rational use of energy resources and the efficient and sustainable supply of power and energy. The Ukrainian government and the EBRD identified several areas for joint activities in the field of sustainable energy: 1) a review of tariff methodology and legislation; 2) the introduction of legal frameworks for renewable energy development; 3) the introduction of legal frameworks for energy efficiency in residential and public buildings. The Bank considered investing in energy efficiency projects in priority areas such as industrial energy efficiency, credit lines to SME energy users, clean power and energy supply, renewable energy, municipal infrastructure and carbon finance.	A number of projects were identified and Terms of Reference developed. These cover several areas that address challenges of various aspects of E2C2/renewables. Most activities were concentrated on legal/regulatory work and capacity building, creating conditions for introducing financial instruments that encourage investments in energy efficient technologies across the board (from generation to consumption). A number of technical assistance projects were launched and stand-alone investment projects and facilities for smaller investments.	Unlike in other areas of the EBRD's work in Ukraine the E2C2/renewables sphere has a strategic framework. Signing SEAP launched long-term and complex engagement with the Ukrainian government aimed at addressing energy efficiency challenges facing the country. Getting agreement between two parties was a good beginning for a practical dialogue platform with the individual ministries and agencies at national and municipal tiers as for assistance and expertise needed to enable investments in this sphere. It also sent positive signal to international community and potentially facilitated development of new multilateral instruments and intensification of the existing global financial facilities. The EBRD SEAP is a good instrument for co-ordinating work with other IFIs/donors working in the country. The EBRD's reputation in the sector enabled it to provide very targeted and highly technical support that contributed to building reliable evidence base for further actions.

	Policy problems/ opportunities/ proposed policy solutions	Ukraine actors	EBRD actors	Other actors	Inputs and Actions	Outputs	Outcomes
June 2009	Complying with international accords and obligations meant that Ukrainian authorities needed to create a whole range of legal, organisational and financial mechanisms that would enable Ukraine's integration into the global system of carbon emission trade. Changes were required to address lack of reliable data, insufficient capacity of newly created agencies and the non-transparent process of decision making in climate change policy. IFI and international donor assistance in this matter was essential.	State Environmental Agency - interested party (key beneficiary)	EBRD Board - decision maker, E2C2 team - expert, adviser	Consultants - adviser	The EBRD launched stage two of project PETER (Preparedness for emission trading). The project covered two countries - Ukraine and Kazakhstan. Its budget was €750,000. Its key objective was to develop a country specific roadmap to a full emissions trading scheme.	The Ukrainian government received assistance and advice in: (a) Understanding costs and benefits of introducing domestic cap-and-trade regimes compared to other instruments of climate mitigation policies; (b) Analysing the cap and trade options and criteria for linking with external emissions trading schemes, such as EU ETS; (c) Identifying potential road maps towards (i) implementation of domestic cap and trade schemes and (ii) linking with external cap and trade schemes; (d) Increasing preparedness and providing practical tools to create a platform and structure for potential discussions with external partners on linking carbon markets.	Creating a solid evidence base was important for facilitating the process of negotiations with the Ukrainian government through UN accords and instruments. Ukraine emission quotas were substantiated by solid facts and figures assisted in negotiations with the EU. In this situation the EBRD (and its consultants) played a role of trusted and objective advisers who could provide equal access to reliable evidence base for all parties.
October 2009	Continuous disputes with international counterparts regarding data and future trends of emissions in Ukraine's economy (total and in specific sectors) were causing delays in joint initiatives and signing of important agreements. Support was needed for providing objective and transparent data on the current situation of emissions in Ukraine and possible scenarios for the future.	State Environmental Investment Agency - interested party (key beneficiary)	EBRD Board - decision maker, E2C2 team - expert, adviser	Consultants - adviser	Launch of the EBRD Study on Adjusted Marginal Greenhouse Gas Abatement Cost Curves with the budget of €1 million and covering four countries, including Ukraine	Consultants reviewed climate change mitigation measures in Ukraine. A report evaluating the cost-effective greenhouse gas emissions reduction measures is available across various sectors and quantifies the impact of different barriers to implementation. It was published at the beginning of 2012. A number of round table events for experts were organised to discuss the results of the report and to disseminate its findings as wide as possible, since it has real impact on many sectors of Ukrainian economy and on climate change policy measures of the Ukrainian government.	Report prepared by the EBRD's consultants was instrumental for reaching the consensus with the European Union during negotiations on Ukraine's share in emission reduction in the framework of second period of Kyoto protocol.

	Policy problems/ opportunities/ proposed policy solutions	Ukraine actors	EBRD actors	Other actors	Inputs and Actions	Outputs	Outcomes
November 2009	While overall Ukraine's economy is extremely energy intensive, the municipal sector is among the worst examples of energy and resources waste. The need for decreasing costs of resources and increasing revenues of municipal utility companies are at the core of addressing this challenge. When spending a significant amount of money on subsidies to the utility companies, the Ukrainian government and local governments are wasting money that otherwise could be invested in capital projects. By investing in energy efficiency measures municipalities can save money, energy and decrease their dependence on the central government as their budgets will be more balanced. However without structural and organisational changes these capital investments won't be complete. The need of TC and policy advice is great and can be addressed via non-lending facilities of IFIs and donors.	Ukrainian government - decision maker (financial contribution of €10 million)	EBRD Board - decision maker, E2C2 team - expert, adviser	Governments of Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway, Poland, Sweden, USAID, EU - decision makers (financial contributions to the fund)	New multi-donor fund E5P - Eastern Europe Energy Efficiency and Environment Partnership - was launched during Swedish presidency of the EU with the initial pledge of €90 million. The EBRD is managing agency for this fund. Its focal area of interest is municipal energy efficiency. Key objectives are: (1) improvement in energy efficiency; (2) significant reduction of CO2 and other GHG emissions; (3) enhanced economic competitiveness and affordability of assets maintenance. Beneficiary countries of E5P include Ukraine (initial beneficiary), Armenia, Azerbaijan, Belarus, Georgia, Moldova).	Fund provided grants for TC projects attached to the investment projects in the sphere of municipal energy efficiency (for example district heating and water). Grants were also provided for TC projects and policy dialogue on energy efficiency related strategies. Decisions are made on the basis of flexible allocation criteria. Various IFIs (the EBRD, WB, IFC, NEFCO, NIB, EIB and others) can act as implementing agencies of these grants.	Ukrainian municipalities have an opportunity to obtain grant funds to cover parts of their investment projects in the sphere of energy efficiency and technical assistance and advice in the process of preparation and implementation of the core investment projects provided by various IFIs, including the EBRD. It helps to improve the affordability of investments and perform in-depth reforms in the municipal services sector. By providing "supply side" and "demand side" investments at the same time through IFI+E5P packages lenders and clients can deliver better results with higher impact and greater sustainability, which was highlighted by several interviewees.
November 2010	Ukraine has one of the largest housing stocks in Europe (over 10 million buildings). Residential buildings could potentially absorb energy efficiency investments worth of around €60 billion. Once implemented, such investments may result in energy savings of over 60 million MWh per year - an equivalent of almost 10 billion cubic meters of imported natural gas or 25 per cent of all Ukraine's natural gas imports. Energy efficiency in residential buildings is an area that attracts interest from many different stakeholders, including IFIs and donors. However due to legal, regulatory and mainly organisational difficulties introducing financially viable projects that will enhance energy efficiency of housing stock is challenging.	Ministry of Regional Development, Housing and Communal Services - interested party (key beneficiary)	EBRD Board - decision maker, E2C2 team - expert, adviser		The EBRD launched a TC project "Improving the Energy Efficiency of Residential Buildings in Ukraine" aimed at promotion of residential energy efficiency. The €1 million project is funded by the EBRD's Shareholder Special Fund. It is designed to assist the Ukrainian Ministry of Regional Development, Housing and Communal Services in addressing challenges in legal and regulatory framework, general public awareness, capacity and low penetration of energy efficient technologies in the country. The programme is coordinated with other IFIs and international organisations.	The project assisted in preparing legislation necessary for energy efficiency investments in the sector. It also helped to develop a web-based information platform - www.teplydim.com.ua - that from 2012 provides the most up-to-date information on best technological solutions, financing opportunities, project case studies and legislation updates. After project completion a web platform is financially supported by Austrian Government.	The EBRD together with other IFIs/donors such as IFC WB, EC, USAID and GIZ helped the Ukrainian government to prepare new legislation on energy efficiency in residential buildings (still not approved after rejection in second reading in October 2013). Contributing towards joint donor initiative the EBRD is actively looking for solutions to inject much needed investments in the residential building sector. It is also building capacity at mid-level of Ministry of Housing, there are now lead and secondary responsible officials that are constantly engaged with the IFIs/donors. Playing donors/IFIs against each other is now a difficult task as they act as one team in the dialogue with the government.

	Policy problems/ opportunities/ proposed policy solutions	Ukraine actors	EBRD actors	Other actors	Inputs and Actions	Outputs	Outcomes
end of the year	There are no active lending facilities for small-scale projects in the sphere of renewable energy. Despite availability of some international financial resources (through GEF and CTF) IFIs are reluctant to engage in the sector due to higher risks (compared to large-scale REN facilities). Considerable pre-project and implementation technical support and advice are needed for these kind of projects.		EBRD Board - decision maker, E2C2 team - expert, adviser	GEF, CTF - decision makers (funding)	The EBRD launched USELF – the Ukraine Sustainable Energy Lending Facility (USELF) as part of the EBRD’s Sustainable Energy Initiative (SEI) addressing the challenges of climate change and energy efficiency. USELF TC support is provided by the Global Environmental Facility through the grant of US\$0.5 million. Investment resources include €20 million provided by Clean Technology Fund (concessional co-financing) and €50 million loan from the EBRD. USELF is a direct lending facility operated by the EBRD for small and medium-sized renewable energy projects where the EBRD provides up to 40 per cent of total project costs or max €10 million, CTF provides up to 20 per cent and the rest to be provided by developer’s equity.	To date (May 2013) USELF received about 100 applications and six projects received approval for funding (with five more in the pipeline). USELF is aimed at promoting projects that are often challenging to finance and implement. It not only provides tailor-made financing, but also technical consultations to businesses and local authorities.	As USELF projects are only at the start of their implementation it is too early to outline outcomes of the facility. However initial stages of implementation revealed some significant challenges that need to be addressed: 1) a limited number of foreign investors willing to invest in RES (about five per cent of project applications); 2) perceived high risks related to the country, sector, regulatory environment; 3) a very negative impact of local share content requirement, its ambiguity and instability; 4) insufficient equity funds (<40 per cent) of project developers, who are financially weak and reluctant to look for an equity partner; 5) lack of experience and resources for project preparation up to the standards required by foreign banks or IFIs; 6) very limited experience with project financing in Ukraine; 7) a new concept of Energy Performance Certificates (EPCs) in Ukraine – only a few EPC contractors exist; 8) Four year delay with biogas and landfill gas tariff legislation, and a still unclear situation with biomass definitions which constrains developers.
February 2011	Ukraine has a strategic place in European energy security architecture due to its geographical location and transition potential, as well as potential of fuel extraction and energy generation. However its formal position outside European Energy Community makes impossible many important transformations and holds back large-scale investment projects.	Prime Minister of Ukraine - decision maker, various government ministries and agencies - interested parties		European Commission - decision maker	Ukraine became a member of Energy Community	It accepts a large number of commitments in various sectors of energy policy, including energy efficiency and renewable energy. Ukraine is gradually integrating EU directives in the sector in its legislation and regulations, making necessary institutional changes.	Ukraine having legal and institutional framework congruent with the one of European Community members enables it to be fully integrated in the European energy markets and enjoy the opportunities provided to the members of the club, including investments and technical advice.
April 2011	Ukraine does not have a government agency responsible for energy efficiency.	President of Ukraine - decision maker			State Agency on Energy Saving and Energy Efficiency is established by Presidential Decree No 462/2011	Institutional framework is improved and relevant capacity of the government should be strengthened.	Agency is primary responsible institution in the area of energy efficiency however its line of subordination (Ministry of Economic Development and Trade) and existence of many other agencies means that institutional frameworks became even more fragmented and key institutions have overlapping or conflicting functions, while others are remaining as "white spots".

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June 2011	Buildings account for a very large share of energy consumption and offer the broadest range of negative cost energy efficiency measures. The building sector (housing, institutional/communal and commercial) consumes about 40 per cent of total heat and 25 per cent of all electricity in Ukraine making this sector a major contributor to greenhouse gas emissions. The energy efficiency in buildings in Ukraine is on average approximately four times lower than that in Western European countries (UNECE, 2008). According to the experts' calculations the decrease of consumption of heat in buildings down to 46-75 kW/square meter per year will allow to decrease the consumption of natural gas by 60-65 per cent ( 14-15 billion cubic meters)	Ministry of Regional Development, Housing and Communal Services - interested party (key beneficiary)	EBRD Board - decision maker, E2C2 team - expert, adviser	Czech Republic government - decision maker (funding)	The EBRD has launched a technical assistance project "Promoting energy efficiency in Ukraine public buildings" focusing on identifying and developing mechanisms for private sector financing of energy efficiency improvements in public buildings such as schools and hospitals in Ukraine. The project, funded by the Czech Republic through a grant of over €200,000, is helping to prepare and develop an ESCO (energy services companies) scheme and to introduce energy performance contracting (EPC) programmes in Ukraine. EPCs are contractual arrangements between the beneficiary and ESCOs for energy saving investments that can be repaid through the savings on future energy bills.	The project assessed the detailed legal and commercial framework for EPC services in Ukraine and conducted an analysis of the market for ESCO services, including the technical potential, capabilities of existing engineering firms, and analysis of financing mechanisms and schemes for EPCs. The project helped identifying the regulatory reforms needed to enable fully flexible use of EPCs in Ukraine and maximise the level of private sector risk participation in line with international practice. The implementation of the scheme was tested in three Ukrainian cities: Dnipropetrovsk, Odessa and Zaporizhzhia.	Through the implementation of this scheme Ukraine public buildings could absorb energy efficiency investments, leading to significant energy savings and a reduction of Ukraine's natural gas imports.
October 2011	There are challenges of reliable and equally accessible data and analysis of Ukraine's emissions trends and forecasts. These are complicating various negotiations with international counterparts and prohibit launching new institutional and financial mechanisms for carbon trading.	State Environmental Investment Agency - interested party (key beneficiary)	OCE jointly with E2C2 and PEU teams - adviser, advocate	consultants - adviser	EBRD published report '2050: GHG emissions projects for Ukraine' prepared in the framework of Ukraine Carbon Market Facilitation Programme (funded by EBRD)	Reliable data, facts and figures that create a basis for decision making.	Increased transparency and reliability of arguments employed by different parties with regard to Ukraine's commitments to greenhouse gas emissions' reduction.

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November 2012	Certain economic groups in Ukraine are not happy about competitiveness in the renewable energy market associated with green tariffs and growing interest from potential investors. Being closely connected with the parliament and the government they are able to influence legal and regulatory changes that provide greater support to local producers of goods and service providers working in the renewable energy sector. While understanding the need for promoting local producers/ service providers international investors are alienated by non-transparent schemes on the market and preferential treatment of certain companies.	Parliament of Ukraine, President of Ukraine - decision makers			New legislation enacted "On amendments to the Law on electricity" (5485-VI signed by President on 22 November 2012 and enacted in April 2013) introduced obligatory "local content" - a share of products, works and services that used in building renewable energy facilities that must be manufactured in Ukraine (hydropower plants and solar rooftops and facade installations are exempted from this rule). Local content Requirement are: (1) for units commissioned before 1 January 2013 – 15 per cent, for units commissioned before 1 January 2013 and 1 January 2014 – 30 per cent, for units commissioned after 1 January 2014 – 50 per cent	All new renewable energy generating facilities will have to comply with the new law which gradually requires a higher share of local goods/services in the total project cost. Each sector of renewables has its own share and schedule, some of which are unrealistic since no equipment is produced in Ukraine for technological processes (biomass renewable energy facilities in particular).	Having initially mostly a positive impact on the market, the Law on Green Tariffs and its further amendments over time introduced a serious handicap that progressively deters new investments in the sector. It means that the acceleration of the process of shifting the share of renewable energy sources in the total energy production is not as fast as planned (10 per cent by 2020 according to Ukraine's obligations in the framework of Energy Community). In some renewable energy sectors the conditions are such that only a very limited group of companies - traditional market players - can benefit from them. This leads to some speculations about non-transparency and unfair treatment of different investors in the renewable energy sector.
September 2013	Ukraine lacks the regulatory framework for introducing energy performance contracts for managing public buildings. Launching a pilot small-scale project in one Ukrainian city will enable development and testing of possible solutions and legal/regulatory models.	Dnipropetrovsk Municipal Energy Management Company (DMEMC), city council of Dniptopetrovsk, Ministry of Regional Development, Housing and Communal Services - interested party (core and secondary beneficiaries)	EBRD Board - decision maker, E2C2 and MEI teams - expert, adviser	E5P Assembly of Contributors - decision maker (TC funding)	The EBRD approved the project "Legal Infrastructure for Private Sector Energy Efficiency Projects in Dnipropetrovsk" which will finance Energy Service Companies (ESCOs) to implement energy efficiency measures in public buildings through energy performance contracts. Total budget - €20 million plus €2.5 million TC funding from E5P (other accompanying TC projects are available to client).	The project is expected to deliver: (i) a framework for markets via the establishment of a legally and commercially viable and replicable contracting structure; (ii) private sector involvement in delivering and financing the investments and further energy savings through involvement in energy management; and (iii) a transfer of skills from TC project implementation support to both project developers and energy performance contract service providers, and to other municipalities. Among a range of TC projects to support investment operation in Dnipropetrovsk there is one TC project - "Energy performance contracting" – that will address the challenges of enabling legal framework for ESCO projects in Ukraine.	The project will support the creation of public sector demand for ESCO energy efficiency projects (in particular energy performance contracts), while supporting private sector ESCOs with finance to supply this demand. This project, including its TC components, will assist in creating the legal and regulatory framework which will unlock the market of energy performance contracts and potentially attract a significant amount of investments that are crucial for modernising existing public buildings and connecting infrastructure. It will address the "demand" side of the energy efficiency challenge.

	<b>Policy problems/ opportunities/ proposed policy solutions</b>	<b>Ukraine actors</b>	<b>EBRD actors</b>	<b>Other actors</b>	<b>Inputs and Actions</b>	<b>Outputs</b>	<b>Outcomes</b>
<b>December 2013</b>	Ukrainian small and medium sized businesses lack access to credit resources, including for the purposes of increasing energy efficiency and producing energy from alternative sources. Ukrainian banks are not able or willing to provide such loans while IFIs are reluctant to work directly with small-scale lenders due to higher costs of business and greater need for TC.		EBRD Board - decision maker, E2C2 and FI teams - expert, adviser		Ukraine Sustainable Energy Financing Framework - first sub-project with Raiffeisen Bank Aval is approved by the Board for the total amount of up to US\$20 million. Total amount of USEFF is US\$100 million with €3.5 million of TC funding provided by Austrian government.	USEFF, like previously UAEPP (2007-2011), will be providing financing via several local partner financial intermediaries (banks and leasing companies) to local companies for projects related to energy saving and renewable energy generation.	It is expected that USEFF will provide much needed funding to Ukrainian companies which are keen on upgrading their production and other facilities to reduce energy intensity and to produce energy from renewable sources. It is expected that 600 MWt of energy will be saved annually as a result of implementing projects in the framework of USEFF.