ENVIRONMENT FORUM

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NGO COMMON POSITION PAPER: ENERGY[1]

Contents

[1] NGO position paper prepared for the Environmental Forum Annual Meeting, 25-27 September 2011, Brussels. This paper represents the opinions of NGOs as gathered during the preparation of this paper. ***The contents of this paper is the sole responsibility of the Environment Forum NGOs and can in no way be taken to reflect the views of the European Union.***

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1. BACKGROUND AND METHODOLOGY

Thematic Papers are developed for each Annual Meeting (AM) of the EF project to prepare more targeted sessions with the European Commission and explore topics of concern to NGOs in the enlargement process. At the 2010 AM, the NGOs selected **'Energy'** and 'Transport' as thematic topics for the 2011 AM. It was also agreed that the papers will be developed in the form of **common position papers** that can be presented to the European Commission and could also be useful for a broader audience at the national and regional level.

The Energy paper[2]was jointly prepared by the NGO representative and Thematic Expert. As a first step to developing these papers, NGOs discussed the two thematic topics during Preparatory Meetings held in February - April. Based on these discussions, draft versions of the papers were developed and presented at the Regional Meeting in May. At this meeting, NGOs were given a further opportunity to discuss and provide additional input to the thematic papers. Revised versions of the thematic papers were then circulated among the NGOs for review and subsequently finalised based on the additional input received. For the energy paper, input was received from NGOs in Bosnia and Herzegovina, Croatia, FYROM, Kosovo[3] , Montenegro, Serbia and Turkey. This paper presents the NGOs position paper and the opinions expressed are NGO opinions.

2. REGIONAL ISSUES

In most countries in the region there is a **monopoly in the energy market** that results in distortions, corruption in decision-making processes, and long-term problems in modernization, introduction of state of the art technologies and the retention of out-dated energy concepts. In the long run this will cause countries to fall behind both economically and socially and can lead to economic, social and in the end political instabilities. Such problems cannot be solved by "diversification of supply of liquid hydro carbonates" or by using existing local coal deposits (valid for almost all countries in the region) because this would result in:

- Greater fiscal deficit;
- Growing damages on the environment from the usage of fossil fuels;
- Bring significant parts of society to the brink of energy poverty; and
- Growing structural imbalances of economies in the region.

A striking characteristic of national energy policies is that **all countries are planning to become regional leaders in energy production and exportation.** This is partially a problem in the approach of political elites which are usually under pressure to second the interests of industrial and energy corporations as well as to gain support from IFIs. In addition, the regional Energy community agreement supports exploration and utilization of all "economically acceptable" production

[2]This paper is linked to the NGO Common Position Paper on Transport which has also been produced for the 2011 AM, as well as papers developed and discussed at previous AMs relating to Climate Change, IPPC and SEA.
[3]Under UNSCR 1244/99

capacities[4], regardless of the consequent costs (burdens) on local communities and national economies. Due to this approach, several communities directly affected by big energy infrastructure plans are strongly opposing their implementation and instead of their voices being listened to, they are often considered by business elites, national authorities and IFIs as opposing the development of economy and a threat to energy security. This has led to instabilities and political disturbances which could be avoided by the involvement of communities, NGOs and other interested local and national stakeholders in the planning processes.

Plans and programs in the region are neither scrutinized in relation to the EU or global climate targets nor with respect to their social, economic and environmental impacts. A systemic problem in all countries in the region, including Turkey, is that **SEAs of programs and policies are often not produced**. In this way, future scenarios of needs and potentials of fulfilling these needs from locally based production are not assessed, thus leading to the proposal of out-dated, traditional and even more fossil fuels dependent plans. It is therefore not strange that Serbia, Montenegro and Bosnia and Herzegovina continue to plan the same shares of energy sources like they did in the mid-1970s. Plans for the development of national production capacities are misled by industrial and business elites that see their interest in producing even more dependency on imported fossil fuels or producing large scale domestic quantities of "dirty" energy.

In the region to date, energy efficiency (EE) and renewable energy sources (RES) have not attracted significant attention among national and regional energy authorities and decision makers. Despite the availability of some funds for EE and RES, especially from the EU and other IFIs, to date there have been a very limited number of projects that have been financed in these areas given the lack of credible projects which are prepared and ready for financing. **Significant bureaucratic obstacles** are another major problem for the implementation of RES or EE projects in the region as is it the lack of support from IFIs to local and national authorities for the preparation of alternative scenarios and programs in the energy sector that could be the base for credible local and regional projects. **In this sense, the Energy Community[5] can be considered to have basically failed to support the green transition of SEE countries** (by allowing national authorities to champion traditional fossil fuels based projects).

3. REGIONAL POSITION

The major challenges for the region in their strategic goal to join EU in relation to this sector are:

- To achieve a decarbonized energy sector;
- To eliminate inefficient fossil fuel subsidies; and
- To improve energy efficiency and energy security.

These require a policy mix containing both demand and supply-side measures. Some of the most

[4] When speaking about economically viable we are clearly pointing to the conservative concept of economically viable which is in most of cases not aiming to internalize negative social, environmental and economical "externalities" of production.

[5] Energy Community of South East Europe (ECSEE) , European Energy Community (EEC).

important issues relate to: **energy security** – this is one of the most important points from the side of national governments; **socio-economic impacts** of energy production and consumption; the **base-load approach** to energy production and consumption / decentralization, localization of production and consumption; and **alternative scenarios** for development of energy sectors in the region. Other issues include: Renewable energy resources with sustainability criteria; models and instruments for the support of RES and EE; EE in housing, industry; Biomass; cumulative impacts (sustainability criteria) for new RES.

NGOs demand that the following sectors **should not be supported by Governments, EU or other IFIs funds**:

- Coal and fossil fuels;
- Nuclear energy / power plants and supporting infrastructure or facilities;
- Biofuels (biomass production can be environmentally unsustainable and may compete with food demand thus its potential impacts must be carefully studied);
- Public support for gas utilization.

Adequate, integrated and reliable **energy networks / infrastructure** are a crucial prerequisite not only for EU energy policy goals, but also for the EU's economic strategy. Competitiveness, security of supply and climate objectives will be undermined unless electricity grids are upgraded focusing on the development of RES, obsolete plants are replaced by competitive and cleaner alternatives, energy is used more efficiently throughout the whole energy chain and state subventions for 'dirty energy sources' are phased out / abolished. A fully interconnected European market will also improve security of supply and help stabilize consumer prices by ensuring that electricity and gas go to where it is needed. European networks including, as appropriate, neighboring countries will also facilitate competition in the EU single energy market and build up solidarity among Member States. Permitting and cross-border cooperation must become more efficient and transparent to increase public acceptance and speed up delivery. Developing the huge renewables potential in Southern Europe will be impossible without **additional interconnections** within the EU and with neighboring / EU accession countries. The energy infrastructures planned today must be compatible with the longer term policy choices. The key for countries economic development, quality of life and EU integration are energy and transport networks which are fully integrated in European ones. The EU candidate and potential candidate countries in the process of adapting their legislation to EU legislation have technologically outdated energy production facilities with high specific fuel consumption, low efficiency of energy transformation processes, and poor environmental performance.

The cross-border nature of energy supply security, energy and transport networks and environmental challenges highlights the crucial importance of regional cooperation. This includes the **Energy Community of South East Europe** (ECSEE) - **The Energy Community Treaty** (ECT)[6], covering Albania,

[6] http://www.energy-community.org/portal/page/portal/ENC_HOME/ENERGY_COMMUNITY

Bosnia and Herzegovina, Croatia, Kosovo (under UNSCR 1244/99), the FYROM, the Republic of Moldova, Montenegro, Serbia and Ukraine. The Energy Community Treaty is a legally binding agreement which entered into force in July 2006 for all SEE countries. Moldova became a fully fledged member as of 1 May 2010, Ukraine officially acceded to the Energy Community on 1 February 2011. The Secretariat is based in Vienna.

Recently, the European Commission welcomed the achievements of the ECSEE, but warned of the risks of not addressing outstanding shortcomings and called for a radical change of attitude to bring about market reforms in the countries. In the coming years a number of existing power plants will require replacement or rehabilitation, electricity networks and gas infrastructures need modernization and further development, energy efficiency and environmental standards have to be fully applied, and unexploited renewable energy potential put in use. The Commission intends to make financial assistance conditional on the effective implementation of the Energy Community *Acquis*, and to link good progress on the enforcement of the *acquis* to a smoother advancement in the accession discussions of the EU candidate countries or potential candidates. It is also important to point out the importance to meet the emission limit values (ELVs) given in the Large Combustion Plants Directive.

3.1 Areas of concern

The **consultation on the Energy Road Map to 2050** which took part in early 2010 was a good opportunity for *governments, expert groups and NGOs* of SEE countries to express their views and to formulate their interests in the future energy policy of the EU in its respect of integration of SEE energy markets, technological development of SEE energy structures and decarbonization of national energy sectors. However, **only a limited number of organizations and authorities from the SEE region took part in this consultation.** This may signal that SEE countries do not currently see that they have a right to express their views of crucial importance for future integration of this region in the energy market of EU, or that they are not really able to plan and implement policies that are not mutually exclusive and destructively competitive but rather supplementary in terms of mutual cooperation in for future energy and climate sustainability of their countries.

4. KEY REGIONAL PROPOSALS FOR ACTION

To overcome the identified challenges the following key actions are recommended: **specific legislation, standardization and interoperability, data protection, infrastructure investments, demonstration, R&D and innovation projects, as well as the promotion of new skills.**

Involvement of IFIs in programming and implementation of energy related programs

- IFIs should give **special attention to full implementation of horizontal legislation especially SEA, EIA and ESPOO Convention in their operations in the energy sector**. This should be of specifically importance to the EC to ensure that IFIs, and especially EBRD and EIB fully comply with SEA and ESPOO Conventions and that the maximum degree of public participation in all phases of program, policies and project work is ensured.

- IFIs should **not support any fossil fuel or nuclear projects** (including all phases and sub phases of such projects) including reconstructions, revitalizations and upgrades in safety, with the aim of prolonging period of usage of such projects and capacities.

- IFIs should avoid investments in **large hydro power plants,** pumped storage hydro plants **and small hydro power plants** which have a significant identified cumulative impact. IFIs should **avoid energy grab projects and large scale "new renewable" projects** which have a clear aim of producing capital for the export of energy to other markets without clear benefits for the market and environment of host countries.

- IFIs should focus on **decentralization and small scale energy production** as well as the "NEGAWAT" approach of energy efficiency and support for small communities and remote areas to establish sustainable energy structures.

- IFIs should allow easier access to capital for projects that are trying to explore and utilize EE potentials in the housing sector using local resources for cogeneration (district heating) and to industry with poor efficiency levels. Therefore, IFIs should explore ways and channels of how to support such projects even before perfect conditions for investment in RES and EE are put in place in whole region. With regards to industry, IFIs should establish clear indicators of the successfulness of any investments, i.e. plants should provide evidence that they have used public finance for real improvements in energy efficiency and not for market extension for example.

- IFI should increase support to local communities to enable the **development of local urban transport structures and capacities**, in particular infrastructure that will enable diversification of non-motorized and non-fossil fuels based transport means.

  IFIs should also provide strong support in the form of **technical assistance to** local and national authorities in the planning and implementation of programs in RES, EE and sustainable urban transport.

Role of EU – To properly address public concerns and secure energy

A challenging role for the EU is **to accommodate public opinion in the strategic energy planning**.

There was a considerable divergence in opinions among NGOs as to the best way to decarbonise the energy sector. EE should be pursued along the full supply chain including power generation, cogeneration, district heating and actions on the demand side. The importance of EE in buildings which represent 40% of EU energy use was underlined. The utilization of offsets in other regions of the world through the *Clean Development Mechanism* and *Joint Implementation* to complement emission trading was also advocated. There is a broad consensus among NGOs on supporting technology and innovation and on extension of the Strategic Energy Technology Plan beyond 2020.

National Governments

National governments have **to show commitments to EU accession through implementation of laws, and adopt on time new developments in EU**.

Infrastructure reform and development present a major challenge to South East Europe, considering their limited resources and administrative capacities. Strong energy regulatory authorities are needed, with enough powers, resources and independence to ensure non-discrimination, effective competition and efficient operation of the energy market.

Civil Society Organizations

As called for in the consultation on the future EU Energy Strategy there is a need to advocate voice of CSOs, especially environmental NGOs. The role for education and media in driving behavioural change (energy saving) and increasing public understanding or acceptance of certain technologies and thus there is a role for CSOs in this area.

5. KEY NATIONAL ISSUES

5.1. Country issues

ALBANIA

Albania is exposed to energy grab from EU countries interested in developing projects that will serve as export to EU Member States (e.g. Italy) and to the EU market. Albania needs to protect its interest from misuse of energy production and damages from the energy production. The Albanian public is considering projects to build new production capacities in coastal areas as not sustainable and not acceptable. To a large extent the Albanian public is calling on the EC, IFIs (WB, EBRD and EIB) and the national government to restart the consultation process to ensure that principles of sustainable development are followed and consultations and alternatives are considered. Furthermore, the Albanian public is calling on all these actors to fully follow the obligations of the Aarhus Convention and to stop considering and providing finance for such projects until all preconditions are fulfilled.

BOSNIA AND HERZEGOVINA

- Energy development strategy for BiH is not developed
- Lack of plans and investments in renewable energy sources and energy efficiency
- Lack of consultations with public and local community in planning energy projects (especially applicable to small hydro power plants)
- EC standards on energy are not met in existing planning documents
- Plans for new thermal power plants (lignite and coal) would tremendously increase GHG emissions, and could become an obstacle for BiH accession to EU
- CSOs are not involved in monitoring of strategic documents that target energy issues
- Development strategy of the energy sector in BiH should be subject of SEA (financed through IPA)
- Bosnian NGOs have expressed their demands toward EU and IFIs:

- EU/EC – to increase pressure on governments in the region to align legislation and goals with EU policies. Also, to allocate sufficient funds for CSOs and sustainable projects in the region.
- IFIs - to stop financing unsustainable projects in energy and transport sectors and increase finances for railways, renewables, urban transport, energy efficiency, etc.

CROATIA

- The Ministry for the Environment recently published information that the development of the Operational Programme "Environment and Energy" has started, and presented the list of projects to be potentially funded from the Cohesion and Structural Funds in 2013.
- As the National Strategic Reference Framework[7] recognizes "Environment protection and sustainable energy use" as a thematic priority, one would expect that the list of projects contains number of projects promoting use of renewable energy and energy efficiency.
- The indicative list of projects (213 in total) contains 156 "waste management" type projects, mostly landfill remediation; 39 "water management" type projects; 13 "nature protection" type projects; 4 "energy" type projects and 1 "air protection" type project. The number of projects in the different areas indicates the priorities of the Government and the influence of water and waste "management" business sectors.
- In addition to clear under representation of projects in the energy sector, an even larger problem related to the content. Despite the official goal of the OP "Environment and Energy" to "develop energy infrastructure with the highlight on sustainable use of energy and energy efficiency" which should be achieved with "support for transition from traditional to renewable energy sources and energy efficiency", nominated projects with the exception of one, clearly do not relate to the specified goal.

KOSOVO[8]

- Lack of air quality monitoring
- No significant progress in industrial pollution control and risk management
- Significant lack in environmental capacity (horizontal and vertical coordination) of Kosovo authorities
- In energy sector most important problems are in power (electricity) billing and collection.
- Lack of further consideration of RES and EE potentials exploration and utilization
- Kosovo still considers its energy future as completely locked into exploration and utilization of significant coal deposits, which in the long run is against Kosovo's strategic plans to become a member of the EU due to EU targets for reduction and phasing out of coal and other fossil fuels and its GHG emission reduction targets.
- At the same time Kosovo is not using any of its RES or EE potential despite some progress made in the assessment of Kosovo's potentials in these areas. Supportive mechanisms and legislation for RES and EE are also not currently in place.

[7]A National Strategic Reference Framework (NSRF) establishes the main priorities for spending the EU structural funding a member state receives between 2007 and 2013. Each member state has its own NSRF. Adopting an NSRF is a new requirement of the Structural Funds regulations for 2007 to 2013. Each NSRF functions as a high-level strategy for the Operational Programmes in the respective member state. The document provides an overview of the economic strengths and weaknesses of the member state's regions, and sets out the approach to future Structural Funds spending across the member state.

[8]Under UNSCR 1244/99

MONTENEGRO

- The serious problem is implementation of energy legislation (The National Energy Development Strategy until 2025, The Energy Efficiency Startegy, The Energy Law and Energy Efficiency Law).
- In the frame of Energy Efficiency Law, the Government had not predicted establishing Energy Efficiency Fund and EE Agency.
- Implementation of EE is very poor.
- RES potential (solar, wind, biomass), with the execption of hydro-power potenial, are not fully utilised. There is also an absence of subsidies for EE and RES (except interventions for solar panels in Podgorica and Budva).
- There is a lack of transaparency in the decision-making proces.
- There is a high level of institutional constraints with regard to implementation of the environmental acquis, especially in sense of fragmentation of responsibilities and jurisdictions.
- A series of environment related by laws need to be adopted for the establishment of fully functioning environmental authorities.
- Inspection and enforcement of environmental regulations is extremely low.
- Particular attention needs to be given to issues related to the Environmental Liability Directive, especially regarding prevention and remediation of environmental damage.
- Implementation and enforcement of legislation in this field require considerable strengthening. In particular, environmental impact assessments, including due consideration of viable alternatives, need to be properly carried out wherever legally required and proper coordination among different authorities as well as with all stakeholders needs to be ensured.
- Montenegro is highly dependent on imported energy resources and in general fossil fuels represent a significant portion of energy in Montenegro's energy mix. This will lead to further destabilization of the macroeconomic situation and to further high levels of inefficiency especially in the industrial sector that spends enormous quantities of energy while producing enormous losses.
- The energy sector is like in other countries of the SEE region, highly distorted by the strong influence of interest groups that exert pressure on domestic decision-makers to plan future developments in line with their interest especially in terms of further subsidies for coal utilization, subsidies for gas and oil projects and subsidies for large scale "new renewable" projects that will have very negative impacts on the society and economy of Montenegro.
- Decentralization and democratization of energy sector for the sake of improving the social and economic status of local communities can be the only response to energy dependency of Montenegrin society.
- A special body responsible for implementing the EE national action plan should be established.

SERBIA

- Most of the problems in the energy sector in Serbia arise from market distortions caused by the monopoly position of the Electric Company of Serbia, Oil Company of Serbia and Gas Company of Serbia. These companies actively influence and distort the decision-making capacity of the government and its agencies in planning the future energy development of Serbia. This is leading to large levels of corruption in companies as well as in the whole system. Their national champion position is also leading to a very formal approach to RES and EE

potentials of Serbia with very low levels of support for these sectors. There are however some RES projects on the agenda that are more in line with the energy grab agenda of foreign multinationals or national companies of those countries where foreign investors are trying to build unsustainable RES projects that will serve as export resources to the EU, for "feed- in-tariffs" and support the profitability of those companies with mostly negative consequences on the environment in Serbia.

- The development of the energy sector is not submitted for SEAs and these plans are not open to wide public consultations thus leading to unsustainable development patterns.
- Nuclear energy is becoming acceptable for Serbian authorities despite existing law prohibiting such activities and the active opposition by significant parts of Serbian society.
- One important problem in this regard is the lack of involvement of environmental CSOs in dialogue, decision making, EU funds programming etc. Moreover, the Government does not recognize environmental organizations as important stakeholders in decision-making processes. Environmental CSOs have to improve their capacities and coordination in order to have stronger role in EU accession processes.
- Capacities for implementation of legislation on national and local level are missing (e.g. Law on strategic environmental assessment).
- ''Business as usual'' approach is environmental field is problematic.

TURKEY

- The main problem in the energy sector is the long term *Take or Pay*Natural Gas Purchase agreements made with Iran, Russia and other countries in the region.
- Energy Efficiency and Renewable Energy laws requested by EC are designed so that the implementation of energy end use efficiency and renewable energy is always delayed.
- Coal and Hydro Power Plant Licences are distributed by the Energy Market Regulation Board easily with the encouragement of the Ministry of Energy.
- Ministries of Energy and Environment try to convince everybody that nuclear energy is safe , economic and clean.
- The tax taken from petroleum products is one of the main sources of income of the Turkish State Budget.
- Obsolete Technologies are reallocated to Turkey from OECD countries.
- There is no political support for open and transparent long term planning.
- In view of turkish NGOs, the EC should advise the candidate countries to target 100% renewable energy as early as possible and discourage the obsolete technology transfer to candidate countries. For Turkey 100 % renewable energy is possible before 2020.
- IFIs should support only the best available end use technologies and best available renewable energy technology investments.

- The Turkish government should use MARKAL Turkey as an energy sector decision support tool and should cancel all tenders of coal, nuclear, hydro, petroleum power plants.

6. EXAMPLES OF PROJECTS IN THE CANDIDATE AND POTENTIAL CANDIDATE COUNTRIES

ALBANIA

- The **Thermo power plant project in Vlora Bay** and the "**Karaburun" Wind Park** project are both very controversial and dangerous;
- The **Aarhus Convention** has been approved and needs to be implemented at the national and local level, especially in the above listed cases.

BOSNİA AND HERZEGOVİNA

NGOs in Bosnia and Herzegovina have expressed the following demands/concerns:

- Improve **consultations with public and local communities** when planning energy projects (especially applicable to small hydro power plants);
- Stop plans for **new thermal power plants** (lignite and coal) as they would tremendously increase GHG emissions, and could become an obstacle for BiH's accession to the EU;
- Development in the energy sector in BiH should be subject to **SEAs** (financed through IPA).

CROATIA[9]

- **Biomass Power plant near Velika Gorica** – The construction of this biomass power plant in the industrial zone near the city of Velika Gorica with a planned installed capacity of 20MW el. and 30MW heat. Beneficiary is HEP Obnovljivi d.o.o, total cost of the project is: €59.5 million.
- **Regional gas pipeline Kukuljanovo-Omišalj** – The construction of a regional gas pipeline between Kukljanovo and Omišalj. Beneficiary is Plinacro d.o.o, total cost of the project is: €23 million.
- **Storage capacities for mandatory stock reserves for crude oil and petroleum products in Brižine** – The construction and reconstruction of storage capacities for crude oil and petroleum products 100.000$m^{3.}$ Beneficiary is the Croatian Compulsory Oil Stocks Agency (HANDA), total cost of the project is: €30 million.
- **Storage capacities for mandatory stock reserves for crude oil and petroleum products in Gaženica –** The construction and reconstruction of storage capacities for crude oil and petroleum products 50.000m^3. Beneficiary is the Croatian Compulsory Oil Stocks Agency (HANDA), total cost of the project is €15 million[10].
- Croatia will be able to access most of this amount through Cohesion and structural funds and in the first two years it will be able to draw a total of €2.205 billion.[11]

[9] http://zelena-akcija.hr/hr/programi/energetika_i_klimatske_promjene/dan_planeta_zemlje_2011_buducnost_je_u_obnovljivim_izvorima_i_energetskoj_ucinkovitosti

[10] http://www.vlada.hr/hr/naslovnica/sjednice_i_odluke_vlade_rh/2010/80_sjednica_vlade_republike_hrvatske

[11] http://eu.mfa.hr/InfoPopup.aspx?mv=297&pr=t&id=8877

The demands of Croatian NGOs regarding Croatian and EU energy authorities are set out below. Actors to whom these demands are addressed are noted in brackets:

- Create a **prequalification program** for 1000 unemployed persons in installers of solar heating systems (Governments);
    - Significant increase (to 20 000 per year from current levels which are below 1000) of subventions for **solar heating systems in households, public institutions and small business** (Croatian government / regional governments);Start **national program of EE** especially in buildings sector which could serve as an anti-crisis measure to the construction sector (regional governments, European Commission);Thorough reform of **incentives for use of RES**, primarily through simplification of procedures for small producers. Support for larger projects (e.g. wind generators, cogeneration power plants on biomass) through public ownership (regional governments);**Redistribution of funding in favor of EE and RES** together with better financial management in Fund for Environmental Protection and Energy Efficiency (Croatian government);Significant increase in **administrative and expertise capacity of local administration** for planning, financing from EU funds and implementation of projects related to RES and EE (regional governments, European Commission);Stop further **privatisation of the energy sector**, especially existing hydroelectric plants which should in their operation respect the principle of environmental flow and be used as support for variable production from RES (regional government);Construct domestic factory (cca 50 MW production per year) of **photovoltaics and panels** in public ownership that would sell small systems for households and public institutions on the domestic market for the cost of production (Croatian government);Stop so-called "**Croatian Nuclear Program**", reintroduce moratorium on planning and construction of nuclear plants in Croatia and active lobby of Croatian government against construction of new reactors in neighbouring countries (Croatian government);End investments for new **large hydroelectric plants** since their social and environmental costs on remaining potential locations are too high (regional governments, European Commission, EIB, EBRD);Stop the construction of **new thermo power plants on coal.** NGOs believe that coal should not be a part of Croatia's energy future (regional governments, European Commission, EIB, EBRD);Create a new "**Crisis Energy Strategy of Croatia**" based on the following presumptions: Consistent adoption of EU goals of 20% renewable (without large hydro) and 20% increase in EE by 2020;
    - Realistic assessment of future energy consumption and prices of traditional energy sources; and
    - Address serious shortages of oil on the world market and Russian gas from the middle of this decade with decreasing options to obtain their supply.

There are some **positive NGO examples** of activities in fields of EE and RES including the **Educational centre for sustainable energy "Solar Academy" on Island Šolta, Croatia.** Environmental NGO Zelena akcija (Friends of the Earth Croatia) is developing an educational centre called the "Solar Academy" in the field of sustainable energy and environment protection, which focuses on the methodology of public advocacy and technology for use of RES. Educational activities mostly consist of weekly workshops and seminars. The goal is to use the Centre for professional gatherings of international and

national institutions that work in the field of environment protection and promotion of sustainable development. The Solar Academy is situated in the former military barracks on the island Šolta near Split which was donated to Zelena akcija by the Croatian government for the period of 10 years. Zelena akcija, in cooperation with many international institutions, renovated the facility to an educational centre "Solar Academy ", where environmental and other NGO activists from Croatia and the SEE region are trained on environmental protection and in particular how to use RES. So far, the Academy has successfully organized nine international and national volunteer camps with 200 volunteers, 10 seminars, workshops or internal gatherings. The biggest event was held from 15-22 August 2009 when Young Friends of the Earth (YFOEE) and Zelena akcija organized a week long preparatory conference and training for more than 70 participants from all over the Europe. This meeting was prepared as an educational/media tool for the mobilisation of youth to actively participate in the public debate on the future climate change negotiations at the UNFCCC COP in Copenhagen in 2009.

KOSOVO[12]

- A new Kosovo **power plant project** which was not transparent to the public and uses resources by lignite burning, as well as planned capacity for this power plant.
- Own-initiatives for **energy production from RES** including the Hydro power plant in Zhur, wind turbines in Golesh and several projects for energy efficiency funded by the EC and GIZ.
- Kosovo has adopted the **Law on Environmental Impact Assessment and Strategic Environmental Assessment Law**, which are harmonized with EU directives in the range of EIA 62% and SEA 90%. However it is obvious that real public participation at the project and program level is still lacking to a large extent. The main problem regarding these laws relates to their implementation. Particularly concerning is the law providing the public the opportunity to take part in decision-making which is to large extent corrupt and thus makes it impossible for the public to really take part in decision-making processes.
- There is a need to establish an E**nergy Efficiency Agency and a Special Fund for Energy Efficiency and Renewable Sources.**

MONTENEGRO

The energy competitiveness of Montenegro can be achieved only by a strong boost of EE measures and the strong utilization of domestic energy potentials, in particular solar, hydro and wind power, but not at the expense of the environment like in the case of the proposed hydro power plant project on the Moraca River which is the object of strong opposition from Montenegrin CSOs and the public. Given this opposition, tenders for this project should be consulted and scrutinized for the viability, and feasibility of the project.

NGOs in Montenegro have expressed the following demands toward the national government:

- Improve **implementation energy legislation;**
- Establishing of **EE Fund** and use this resource for funding energy efficiency projects;
- Establish **subventions for companies and citizens in the energy field**;

[12] under UNSCR 1244/99

- Make use of the country's huge **solar energy** potential;
- Increase the level of **transparency** in the process of developing Montenegrin energy potential (especially hydro potentential).

SERBIA

- EPS *monopoly position* is leading to fully formalize the approach towards the RES and EE potential of Serbia, with very low levels of support for these sectors. There are however some RES projects on the agenda that are more in line with the **energy grab agenda** of foreign multinationals or national companies which are trying to build unsustainable RES projects to export energy to the EU, which will serve as drainage for "feed-in-tariffs" and support the profitability of these companies with mostly negative consequences in terms of environment damages and the growth of deficits in Serbia. **Examples** of this include: large wind farm projects, plans to build a number of "small" hydro power plants on Ibar and Lim rivers and in the "Stara Planina" protected mountain area, plans to build large HPPs on Drina River despite the growing opposition of local communities and national NGOs.

- Energy sector development is not submitted for **SEA** and these plans are not consulted in wide public consultations thus leading to unsustainable development patterns.

- **Nuclear energy** is becoming acceptable for Serbian authorities despite an existing law prohibiting such activities and the active opposition of significant parts of Serbian society and indicates the corruption of Serbian decision-making processes.

Turkey

NGOs in Turkey have expressed the following demands:

- Stop public support for gas utilization;
- For all end-use needs, **best available technologies should be manufactured and used locally** in Turkey to avoid being the waste storage or shower of other OECD countries.

ANNEX I: ENERGY IN THE EU[13]

1. Background

The aims of the **EU's energy policy** are supported by market-based tools (mainly taxes, subsidies and the EU emissions trading scheme), the development of energy technologies (especially technologies for energy efficiency and renewable or low-carbon energy) and by Community financial instruments.

The EU's energy policy has three key elements: **competitiveness, supply security and sustainability**, all of which are interrelated. The EU is putting in place an ambitious energy policy - covering the full range of energy sources and has made a commitment to integrate environmental concerns in all relevant policy areas, including energy[14]. Since 1997, the EU has had a renewable energy policy which has enabled significant progress to be made towards the EU's objectives of reducing GHG emissions, ensuring security of supply and improving EU competitiveness. In December 2008, the EU adopted a package of measures with the objective of reducing the EU's contribution to global warming and guaranteeing energy supply. This package aimed to achieve the 20-20-20 targets which are to achieve a reduction in EU GHG emissions of at least 20% below 1990 levels by 2020, for 20% of EU energy consumption to come from renewable resources by 2020, and for a 20% reduction in primary energy use compared with projected levels, to be achieved by improving energy efficiency also by 2020. The EU plans to set up a network of carbon capture and storage (CCS) demonstration plants by 2015 to test its viability, with the aim of commercial update of CCS by around 2020. The European Commission's 'Trends to 2030' expectations are that renewable will meet between 32.6% and 36% of electricity consumption by 2030.

The EC is currently preparing an **Energy Roadmap to 2050** which is expected to be presented towards the end of 2011. This Energy Roadmap will follow the **Low Carbon Economy Roadmap 2050**[15] adopted by the Commission on 8 March 2011 and will specifically focus on decarbonisation in the energy sector. The agreed framework for post-2020 consists of two elements: the Heads of States' commitment to reduce GHG emissions by 80-95% by 2050 and the directive on the EU Emissions Trading System (ETS), which will continue to reduce the emissions cap for ETS sectors by 1.74% each year beyond 2020. Given the difficulty to eliminate emissions in sectors such as transport and agriculture within the 2050 timeframe, achieving the Heads of States' commitment is only certain if the power sector emits zero carbon well before 2050.

Public opinion[16] on the strategic energy planning process is presented below.

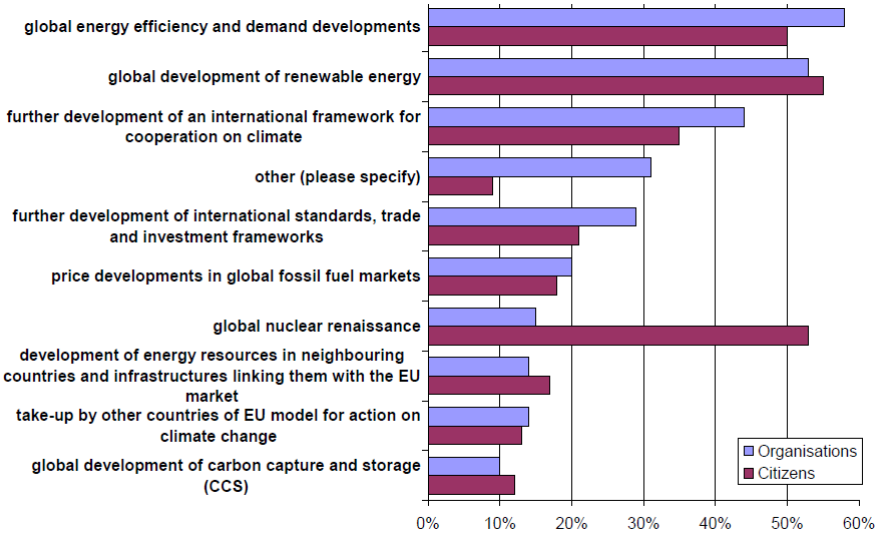
[13] Prepared by TE as the background information for NGOs

[14] http://ec.europa.eu/environment/integration/energy/index_en.htm

[15] Commission of the European Communities, (2011), A Roadmap for moving to a competitive low carbon economy 2050 (COM(2011)112), Brussels, 8/3/2011. http://ec.europa.eu/clima/documentation/roadmap/docs/com_2011_112_en.pdf

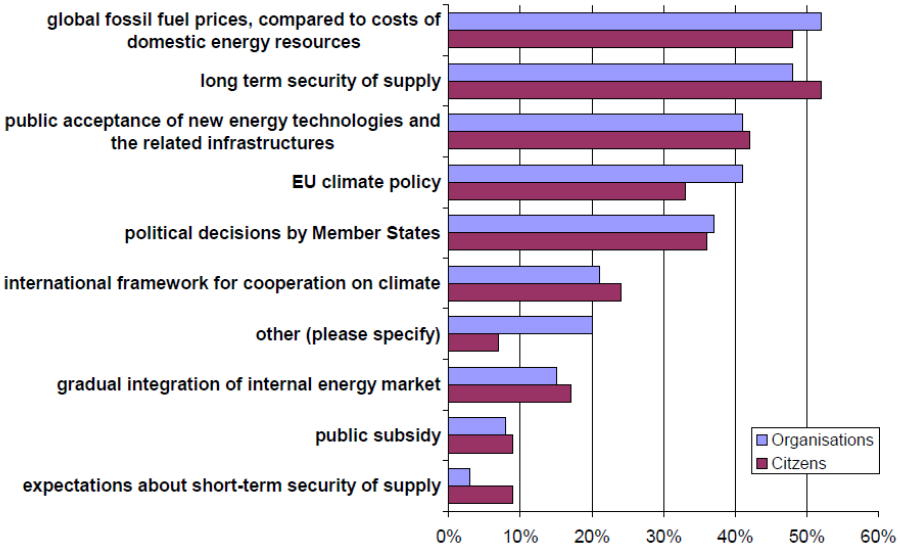
[16] Results of the public consultation on the "Energy Roadmap 2050", http://ec.europa.eu/energy/strategies/consultations/20110307_roadmap_2050_en.htm

*Looking forward, EU energy policy may be increasingly influenced by developments in global energy supply and demand, international cooperation on climate and initiatives taken **outside the EU**. Which developments should be considered in the Energy Roadmap 2050? On which do you think a stronger EU line is necessary? (Pick three most important ones)*



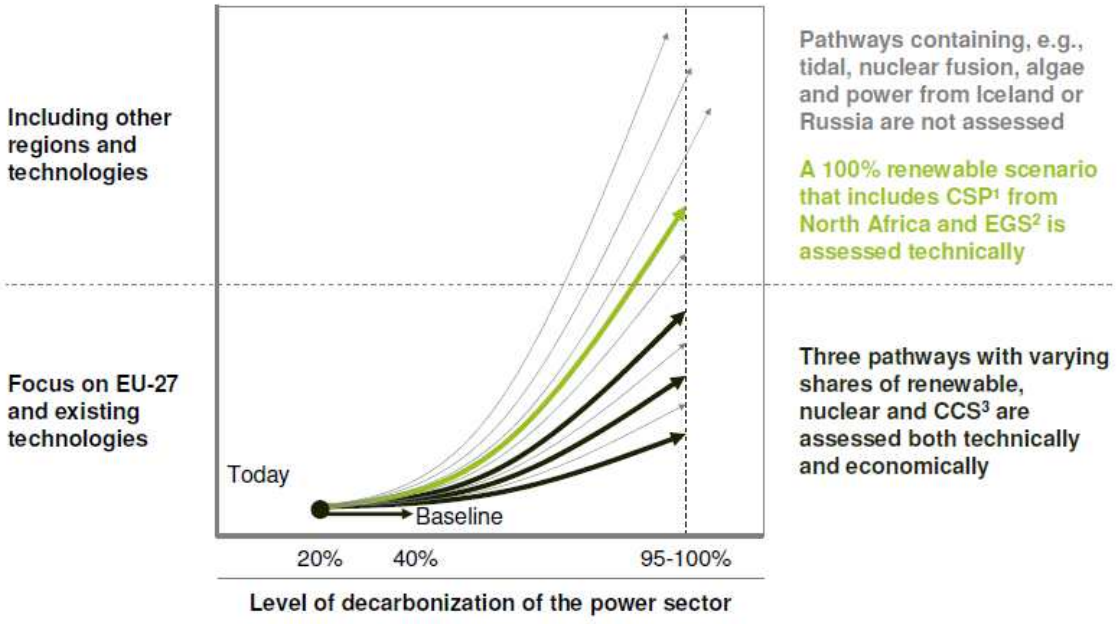
Clarity on the future legislative framework is needed to avoid a lock-in to high carbon investments and stranded costs in the associated assets.

*What are the most likely key drivers for the **future energy mix** in the EU? (Pick 3)*



2. EU energy policy and the challenges ahead

The EU approach must be placed in a long-term perspective beyond 2020. Many of the investments which are needed in the energy system are long-lived, so as much clarity as possible about policy after 2020 is needed now. More generally, **clear thinking about the future can encourage the take-up of the widespread opportunities which the transition to a low-carbon energy system can offer**. Scenario analyses carried out to date suggest that the transition to a low-carbon energy system can be feasible in technical and economic terms. The latest update of the "Energy Trends for 2030 – update 2009"[17] foresees slight growth of primary energy consumption to 2030.



1 Concentrated Solar Power (thermal, not photo voltaic)
2 Enhanced Geothermal Systems
3 Carbon Capture and Storage

The EU's **dependency on imported fossil fuels** will continue to be high for oil and coal and will increase for gas. **Oil demand** is expected to see two different developments in parallel: decline in the EU-15 countries and constant growth in new Member States, where demand is expected to grow by 7.8% between 2010 and 2020.

The dependency on **gas** imports is already high and will grow further to reach about 73-79% of consumption by 2020 and 81-89% by 2030, mainly due to the depletion of indigenous resources. The adopted regulation on security of supply requires investments in infrastructures to increase the resilience and robustness of the gas system in the event of a supply disruption. The aim of the **Southern Corridor** is to directly link the EU gas market to the largest deposit of gas in the world (the

[17] Based on the PRIMES modelling framework

Caspian/Middle East basin) estimated at 90.6 trillion cubic meters. The key potential individual supplier states are Azerbaijan, Turkmenistan and Iraq. If political conditions permit, supplies from other countries in the region could represent a further significant supply source for the EU. The key transit state is Turkey, with other transit routes through the Black Sea and the Eastern Mediterranean. The strategic objective of the corridor is to achieve a supply route to the EU of roughly 10-20% of EU gas demand by 2020. With the financial support of the Commission[18] and great effort of pipeline companies, concrete transportation projects, namely Nabucco, ITGI, TAP and White Stream, are already in the development stage and other possible options are being studied. Moreover, the **Nabucco Intergovernmental Agreement**, signed in July 2009, has provided Nabucco with legal certainty and terms for transporting gas through Turkey and created a precedent for further extension of transportation regimes. The main supplier in the CEE region - Gazprom delivers the overwhelming bulk of gas imports in the region (Poland: 70%, Slovakia: 100%, Hungary: 80%, and for **certain Western Balkan countries: 100%**). Due to *inter alia* monopolistic, isolated, and small markets, long-term supply contracts and regulatory failures, the region is not attractive for investors or producers.

The main challenges for electricity infrastructure is growing demand and increasing shares of **generation from renewable sources**, in addition to further needs for market integration and security of supply. Gross electricity generation in the EU-27 is projected to grow by at least 20% from about 3,362 TWh in 2007, even without taking into account the possible effects of strong electro-mobility development. The share of renewables in gross electricity generation is expected to be around 33% in 2020[19], of which variable sources (wind and solar) could represent around 16%. More detailed information for the horizon up to 2020 is provided in the national renewable energy action plans (NREAP) which Member States have to submit to the Commission under Directive 2009/28/EC. Most of the growth in wind capacities and generation will be concentrated in Germany, the United Kingdom, Spain, France, Italy and the Netherlands, while solar capacities and generation growth will be even more concentrated in Germany and Spain and to a lesser extent in Italy and France. Alongside renewables, fossil fuels will continue to play a role in the electricity sector. Ensuring compatibility with climate change mitigation requirements of fossil fuel use in the electricity and industrial sectors may therefore require the application of CCS on a large and trans-European scale.

The Energy 2020 Roadmap will be a plan to cut, among others, **energy consumption**. The EU promotes more energy efficiency in the transport sector and in buildings - the two areas where consumption can be cut the most. Homeowners, landlords and tenants would get incentives for renovations and other energy-saving measures. Local and national governments would consider energy efficiency when buying products and services. Better energy labelling would push manufacturers to develop more efficient products. Consumers would be empowered to make price comparisons and to easily switch suppliers, who would have to provide them with clear details about their bills.

[18] EEPR and/or TEN-E programmes
[19] According to the Reference scenario

3. Key recent developments

On 8 March 2011, the European Commission published the **'Roadmap for moving to a competitive low carbon economy in 2050'**[20]. The roadmap is a key deliverable under the Europe 2020 Resource Efficiency Flagship published in January 2011. The low carbon roadmap sets out milestones to achieve an 80 per cent reduction in domestic EU GHG emissions by 2050 and identifies the percentage reductions that would have to be achieved by 2030 and 2050 over 1990 levels by key sectors. Sectoral dialogues will be initiated and sector specific policy initiatives and roadmaps (e.g. the 2050 Energy Roadmap) will be developed. The Commission invites the Member States, candidate and potential candidate countries to take the roadmap into account in further development of EU, national and regional policies for achieving a low carbon economy by 2050.

On 8 March 2011, the Commission also published the **Energy Efficiency Plan 2011**[21] which notes that while the EU is on track to meet the overall emission reduction goal of 20% as well as the renewable energy objective of 20%, at present the EU is set to achieve only half of the objective to reduce final energy use by 20% by 2020. Implementation of the Energy Efficiency Plan is expected to allow the EU not only to deliver on existing policy commitments under the climate and energy package by meeting the energy savings target, but also help to achieve a 25% overall greenhouse gas emission reduction by 2020. The Plan contains sections on the public sector leading by example; sections on the building, industry, and transport sectors; a section on financing; a section on consumers; and finally a section on a framework for national efforts.

On 28 March 2011, the Commission presented the '**Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system'**[22]. The roadmap outlines a number of initiatives as part of an overall strategy to 'increase mobility, remove major barriers in key areas and fuel growth and employment' while simultaneously reducing GHG emissions by 60 per cent by 2050.

[20] Commission of the European Communities, (2011), A Roadmap for moving to a competitive low carbon economy 2050 (COM (2011)112), Brussels, 8/3/2011. http://ec.europa.eu/clima/documentation/roadmap/docs/com_2011_112_en.pdf

[21] Commission of the European Communities, Energy Efficiency Plan 2011 (COM(2011)109), Brussels, 8/3/2011, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0109:FIN:EN:PDF

[22] Commission of the European Communities, White Paper - Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system, (COM(2011)144), http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0144:FIN:EN:PDF