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# ASSESSMENT OF EU POLICY



## SUSTAINABLE ENERGY IN DEVELOPING COUNTRIES: SHIFTING TO RENEWABLES

by Mirjam van Reisen



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*Assessment of EU Policy*

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# Foreword

Climate change and sustainable energy production are high on the political agenda, public debate generally focusing on how the use of fossil fuels can be reduced. Much less attention is given to the lack of access to energy of people living in poverty in developing countries. Remarkably, the solution to both issues is the same: renewable energy. In developed countries, we need to switch from fossil fuels to renewable energy to combat climate change. In developing countries, renewable energy is needed for development and to prevent people from becoming dependent on fossil fuels, which will become scarce and more expensive in the years to come. In recognition of this, the Johannesburg Renewable Energy Declaration expressed international commitment to globally increase the supply of renewable energy.

This urgent and radical shift to renewable energy needs to be made at many places simultaneously. European citizens need to embrace green electricity, companies must reduce their energy use and strive towards climate neutral production, and governments should push for low carbon development.

Equally, there is an urgent need to address the choices to be made in meeting the energy requirements of developing countries. Development policies need to pay attention to this critical issue. Firstly, it must be recognised that people in developing countries do need access to energy for development. However, this need can be met in a sustainable way with a shift to renewable energy.

Today, major development funds still support the extension of fossil fuel energy production. This keeps developing countries dependent on fossil fuels, which are often imported and, hence, expensive. The good news is that, where fossil fuel energy is costly and scarce, renewable and decentralised energy production is usually a far more adequate and cost effective way of providing people in developing countries with access to energy, while also adding to sustainability.

In this report, Hivos has asked EEPA to investigate the extent to which the European Union (through the European Commission) promotes renewable energy through its cooperation programmes with developing countries. The Country Strategy Programmes (CSPs), or 'country programmes', were looked at in the context of the identified need to switch to and supply renewable energy. The outcome of the research is surprising: in many country programmes renewable energy does not receive the attention needed to stop energy poverty.

In 2010, the country programmes are being reviewed; the EU Member States and the European Parliament will be participating in the review process together with the European Commission. This upcoming review is an important opportunity for EU development cooperation to make a radical shift in favour of renewable energy.

Eco Matser

*Coordinator Climate, Energy and Development at Hivos, The Hague*

# Key Messages

1. In terms of Official Development Assistance (ODA), the European Commission (EC) is a major contributor to the expansion of fuel-rich investment in transport in developing countries, but EC support for investment in the renewable energy sector is inadequate.

The European Commission should develop a strategy to ensure energy sustainability in its energy policies under infrastructure (which covers transport, water, energy and urban development) and ensure that its policies are coherent with combating climate change.

2. Large-scale investment in renewable energy is needed for renewable energy to contribute substantially to increased access to energy, and to make a difference in fossil fuel emissions. Given the size, scope and focus of the EU ODA programme, the EU is well placed to broker investments in large renewable energy programmes that would benefit developing countries.

The EC should initiate and broker initiatives aimed at large investments in renewable energy for developing countries, especially least developed countries.

3. The European Commission does not record financial allocations to renewable energy. The Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) statistical recording also does not record commitments to renewable energy.

The European Commission should propose that the OECD DAC record commitments to renewable energy specifically. The EC should also recommend that the EU Member States record spending on renewable energy and lead by example by recording ODA commitments and disbursements regarding renewable energy.

4. European Commission allocations to energy regionally favour the Balkans and former Soviet Union and Mediterranean countries. Investment in energy in Asia and Latin America is negligible and in the African, Caribbean and Pacific (ACP) region is very small compared to the needs of the region.

The European Commission should increase its allocation to energy and increase investment in energy for least developed countries in Asia, Latin America and the ACP region.

5. While the EC has initiated specific initiatives to promote renewable energy, which are welcome, EC investment in renewable energy through its mainstream programmes of cooperation with developing countries (CSPs) remains very limited. It was found that only 15 of the 99 countries studied (or 15%) included 'sustainable' energy as a focal or non-focal sector in their country programmes. The EC estimates that its spending on renewable energy, as a proportion of total investment in the energy sector, is only 13 per cent. Renewable energy receives a mere 0.2 per cent of overall ODA allocations.



The EC should increase its financial allocation to programmes in the renewable energy sector in its country programmes with developing countries, through the review of current programmes, as a means of mainstreaming the development of renewable energy with partner governments.

6. The main EU instruments for cooperation with African, Caribbean and Pacific countries and countries in Asia and Latin America (the ACP-EU Cotonou Agreement and the EU Development Cooperation Instrument) do not include specific commitments to renewable energy, and, in that sense, a framework for policy development in this area is lacking.

The review of the main EU instruments for development cooperation (the ACP-EU Cotonou Agreement and the EU Development Cooperation Instrument) should identify a framework for policy development in support of renewable energy in ACP countries, Asia and Latin America, and set investment targets to ensure increased allocation to this sector.

7. Without a clear policy on energy and climate change, ODA is at risk of being misused to finance climate change adaptation and mitigation.

The polluter should pay; therefore, those countries that have emitted large amounts of greenhouse gases (GHGs) over the past decades should pay for climate change adaptation and mitigation measures. Climate funding should be additional to ODA. However, ODA should incorporate climate change policies, for example, by directing funding for energy at the need to move away from fossil fuels, both for climate reasons as well as to prevent dependency on fossil fuels, which is not a sustainable development model.

# Report

# 1. EU Policy on Access to Energy for Development

## EU leadership in renewable energy

In the EU, there is increasing recognition of the centrality of sustainable energy for development and its role in combating climate change. This is illustrated in the following statements made by the Commissioner for Energy, Andris Piebalgs, who is currently also designated Commissioner for Development Co-operation, in his personal blog in 2009:

*The Sun, our nearest star is what made life possible on Earth and continues to provide light and power. It is sunlight that enables plants to turn carbon dioxide into organic compounds and it is again sunlight that drives our planet's climate and weather. It is, therefore, only fitting that we turn to the sun to find a renewable source of energy.<sup>1</sup>*

In his blog, Commissioner Piebalgs also tackles one of the main criticisms of renewable energy, the issue of its storage. He firmly expresses the need to think beyond this issue, referring to EU investments in the search for solutions:

*I think it is not acceptable to say that we'd better use fossil fuels instead of renewable energies because wind and sun cannot be stored. As a matter of fact, fossil fuels are nothing but stored solar energy, and we'd better to have something else stored in stock, for the moment they run out.<sup>2</sup>*

## Relevance for developing countries

In a review by the EC in 2008 'European development cooperation in infrastructure – A review of the past twelve years', then Commissioner Benita Ferrero-Waldner of EuropeAid acknowledged the significance of climate change for developing countries and identifies the EU as a key player in the climate change agenda. Commenting that the EU is "at the heart of the process" on the issue of climate change she observes:

*The EU's high profile on climate change can directly benefit the poorest and most vulnerable developing countries.<sup>3</sup>*

## Demand for electricity in developing countries

This report focuses on energy, which plays an important role in the economy of every country, especially developing countries. Over 1.6 billion people currently have no access to electricity and 2.4 billion rely on wood and dung for their energy needs.<sup>4</sup>

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<sup>1</sup> See: <http://blogs.ec.europa.eu/piebalgs/harnessing-the-suns-power/>, 24 September 2009 (accessed 2 December 2009).

<sup>2</sup> See: <http://blogs.ec.europa.eu/piebalgs/putting-sun-and-wind-in-a-bottle/>, 10 September 2009, (accessed 2 December 2009).

<sup>3</sup> See foreword of European Commission. (2008). *European development cooperation in infrastructure – A review of the past twelve years*. Brussels, p. 0.

<sup>4</sup> International Energy Agency: *the world energy outlook (2007)*. *Energy Economics: A Place for Energy Poverty in the Agenda?* (Energy Journal 2007 Volume 28, Number 3), page 3, [http://www.worldenergyoutlook.org/energy\\_Vol28\\_number3\\_2007.pdf](http://www.worldenergyoutlook.org/energy_Vol28_number3_2007.pdf).

According to the Energy Information Administration (EIA), world energy consumption is projected to increase by 44 per cent between 2006 and 2030. The total demand for energy in non-OECD countries<sup>5</sup> will increase by 73 per cent, compared to an increase of 15 per cent in OECD countries.

### **Poverty and energy**

The United Nations (UN) published a report on the energy challenge in 2005 in which the UN linked having no access to energy with poverty and the achievement of the Millennium Development Goals (MDGs).<sup>6</sup> There is international consensus that the current use of firewood cooking ovens is devastating to natural resources and detrimental to health in developing countries. The use of firewood for fuel leads to deforestation, respiratory conditions, and adds to women's drudgery as they sometimes have to walk for up to two days to collect firewood.

### **Overreliance on fossil fuels and dependency**

Overreliance on fossil fuels to provide for energy needs is not advisable for countries that do not have access to such fuel, given the dependency it creates as well as the risk of economic instability due to price fluctuations.

### **Potential for EU leadership in renewable energy and poverty eradication**

As developing countries seek to reduce poverty, improve services and industries, and strengthen their economies, developing and supporting the introduction of renewable energy will benefit poverty reduction and facilitate the shift to sustainable energy to combat climate change. Increased renewable energy use is a key solution to the environmental and energy challenges the world is facing today.

The EU has the potential to lead a shift in energy policy in developing countries through ODA, by spearheading the introduction of renewable energy to help meet the energy demands of developing countries on a broad scale.

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<sup>5</sup> See: <http://www.eia.doe.gov/oiaf/ieo/highlights.html> and <http://www.eia.doe.gov/oiaf/ieo/highlights.html>, Energy Information Agency, (accessed 2 December 2009).

<sup>6</sup> UN-Energy. (2005) *The energy challenge for achieving the Millennium Development Goals*. New York: UN-Energy. Available at: <http://esa.un.org/un-energy/pdf/UN-ENRG%20paper.pdf> (accessed 11 December 2009).

## 2. The EU: A Critical Development Actor

### **The EU: A global aid player**

The EU is a critical player in development policy. The European Commission and the Member States contribute approximately 55 per cent of global aid flows yearly, which equals about €56 billion. The European Commission administers a fifth of this aid. On average, the European Commission allocates €8 billion a year to development cooperation, and it is the proportion of these funds allocated to renewable energy that is the focus of this report.

### **The Lisbon Treaty**

The legal basis for EU aid is the Lisbon Treaty. This Treaty includes an article on development cooperation which identifies the “eradication of poverty” as the principle aim of EU development cooperation. This objective defines the programme of the European Commission and the programmes of the Member States; hence, it also defines the energy policy of the European Union towards developing countries, in the context of development cooperation. The Treaty further stipulates that this objective is relevant to development cooperation with all developing countries as listed by the OECD DAC. The Treaty requires the European Commission to coordinate the development policies of the 27 EU Member States and ensure that the policies that affect developing countries are coherent with its development objectives.

### **The European Development Fund and the Development Cooperation Instrument**

European Commission aid for African, Caribbean and Pacific (ACP) countries is provided through the European Development Fund (EDF), with a total of €22.682 billion allocated in the 10th EDF (2008–2013). Aid to countries in Asia and Latin America is arranged in the Development Cooperation Instrument (DCI) and is set at €10.057 billion for the period 2007 to 2013.

As one of the largest international donors covering the whole of the developing world, the EU has the potential to drive a development energy policy to help meet the sustainable development needs of the developing world, while also contributing to combating climate change. In this, the EU should be guided by the Lisbon Treaty objective, to eradicate poverty, as the principal objective of international development cooperation. Given the European Commission's role and leadership, this will also help to bring about a shift in the energy policy of EU Member States towards renewable energy in the context of development assistance.

# 3. Binding EU Legal Framework for Energy in Development

The EU has a number of main policy frameworks in development cooperation that are legally binding. These are the ACP-EU Cotonou Agreement, the Development Cooperation Instrument (DCI) and the European Neighbourhood and Partnership Instrument (ENPI). These instruments contain particular provisions in relation to energy policy.

## ACP-EU Cotonou Agreement

The ACP-EU Cotonou Agreement is a legally binding cooperation agreement between the EU and the countries of Sub-Saharan Africa, the Caribbean and Pacific. It identifies energy as an indicator of the achievement of MDG 7, which is to ensure sustainable development: "Energy use (kg oil equivalent) per \$1 GDP (PPP)" and "Proportion of population using solid fuels".<sup>7</sup> The ACP-EU Cotonou Agreement further contains the following relevant articles in relation to energy. Article 23 on Economic Sector Development refers to:

*...development of competitive industrial, mining and energy sectors, while encouraging private sector involvement and development.*<sup>8</sup>

Article 30 on Regional Cooperation Agreement states that cooperation will:

*...support a wide variety of functional and thematic fields which specifically address common problems and take advantage of scale of economies, including... [in] the environment; water resource management and energy.*<sup>9</sup>

Article 32 on Environment and Natural Resources refers specifically to renewable energy. It states that cooperation on environmental protection and the sustainable use and management of natural resources will aim at, among other things:

*...supporting specific measures and schemes aimed at addressing critical sustainable management issues...such as...renewable energy sources notably solar energy and energy efficiency...*<sup>10</sup>

As part of Information and Communication Technologies, and Information Society, Article 43 provides that the Parties will take measures to enable the ACP population to more easily access ICT through various measures including:

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<sup>7</sup> Official Journal of the European Union. (2000). Partnership agreement between the members of the African, Caribbean and Pacific Group of States of the one part, and the European Community and its Member States, of the other part, signed in Cotonou on 23 June 2000. Available at: [http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:22000A1215\(01\):EN:HTML](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:22000A1215(01):EN:HTML) (accessed 14 12 2009), p. 19, (accessed 14 December 2009).

<sup>8</sup> Ibid, p. 32. <sup>9</sup> Ibid, p. 33. <sup>10</sup> Ibid, p. 33. <sup>11</sup> Ibid, p. 37.

...the development and encouragement of the use of affordable renewable energy resources...<sup>11</sup>

## Development Cooperation Instrument

The Development Cooperation Instrument is a legally binding document that contains various thematic programmes including the Environment and Natural Resources (including Energy) Thematic Programme (ENRTP), in which it is explicitly stated that parties to the ENRTP should “promote international environmental governance and Community environmental and energy policies abroad”. Through this thematic programme, the DCI more clearly acknowledges the importance of renewable energy than the ACP-EU Cotonou Agreement.

Article 13 specifies the objectives of the ENRTP as:

*[T]o integrate environmental protection requirements into the Community's development and other external policies as well as to help promote the Community's environmental and energy policies abroad in the common interest of the Community and partner countries and regions.*<sup>12</sup>

The DCI identifies the following areas of activity under the ENRTP:

*...supporting sustainable energy options in partner countries and regions, through integration of sustainable energy in development plans and strategies, developing institutional support and technical assistance, creating a favourable legislative and policy framework to attract new business and investors in renewable energy, enhancing the role of energy as a means to create income generation for the poor, promoting innovative financing approaches, and encouraging regional cooperation between governments, nongovernmental organisations and the private sector in the above areas. The Community's strategic actions will give particular encouragement to the use of renewable energy sources, increased energy efficiency, and the development of appropriate energy regulatory frameworks in the countries and regions concerned and the replacement of especially damaging energy sources by others which are less so.*<sup>13</sup>

The section on Water and Energy requires parties to “[foster] greater use of sustainable energy technologies”.<sup>14</sup>

In relation to Central Asia, Article 8 states that Community assistance will focus on, among other areas of additional assistance:

*[E]nergy and transport sectors, including the security and safety of international energy supply and transport operations, on interconnections, the networks and their operators, renewable energy sources, [and] energy efficiency.*<sup>15</sup>

In relation to the Middle East, among the areas of additional assistance, Article 9 (c) provides for:

*[P]romoting regional cooperation, dialogue and integration, including with countries covered by Regulation (EC) No 1638/2006 and other Community instruments via the support to integration efforts within the region, for example on the economy, energy...*<sup>16</sup>

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<sup>11</sup> *Ibid*, p. 37.

<sup>12</sup> Official Journal of the European Union. (2006). Regulation (EC) No 1905/2006 of the European Parliament and of the Council of 18 December 2006 establishing a financing instrument for development cooperation, Brussels. OJ L378/52 Article 13.1, Vol. 49, 27 December 2006, p. 52. Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:378:0041:0071:EN:PDF> (accessed 14 December 2009).

<sup>13</sup> *Ibid*, Article 13.2(e), p. 53. | <sup>14</sup> *Ibid*, Article 5.2(s), p. 48. | <sup>15</sup> *Ibid*, Article 8(f), p. 49. | <sup>16</sup> *Ibid*, Article 9(c), p. 49.

## European Neighbourhood and Partnership Instrument (ENPI)

The European Neighbourhood and Partnership Instrument is a legally binding regulation that covers cooperation with countries in the Mediterranean and Balkans and countries of the former Soviet Union. Under the ENP, a set of priorities are defined by the European Union and the partner countries to be incorporated in a series of jointly agreed Action Plans covering energy, transport and the environment. Energy and renewable energy are specifically mentioned in Article 2 of the ENP: <sup>17</sup>

*[P]romoting cooperation in the sectors of energy, telecommunication and transport, including on interconnections, networks and their operations, enhancing the security and safety of international transport and energy operations and promoting renewable energy sources, energy efficiency and clean transport.*<sup>18</sup>

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<sup>17</sup> See: [http://ec.europa.eu/world/enp/index\\_en.htm](http://ec.europa.eu/world/enp/index_en.htm) (accessed 14 December 2009).

<sup>18</sup> Official Journal of the European Union. (2006). Regulation (EC) No 1638/2006 of the European Parliament and of the Council of 24 October 2006 laying down general provisions establishing a European Neighbourhood and Partnership Instrument, Brussels. OJ L310/4 Article 2.2(o), Vol. 49, 9 November 2006, p. 4.



# 4. EU Policy Framework for Energy in Development

The EU policy framework for energy in development is elaborated in more detail in a number of EU Council Decisions and European Parliament resolutions. European Presidencies by Member States have set the agenda for the Council, which is reflected in Council Decisions. EU Council Decisions are binding on the European Commission and EU Member States, whereas the European Parliament resolutions only provide political guidance on the position of the EU or of the European Parliament. The ACP-EU Joint Parliamentary Assembly also provides important political guidance on issues of joint interest between ACP countries and the EU.

## EU Council: The 2007 Portuguese Presidency

The development of an EU agenda for energy in the context of development was given substantial impetus by the Portuguese Presidency in 2007. Under this presidency, the European Council adopted conclusions that emphasise the importance of access to energy, and the need to enhance energy security in developing countries through renewable energy, technology and energy efficiency. The Council called on the Commission and the Member States to prioritise energy in country programmes, facilitate dialogue with partner countries and implement specific actions, including strengthening the EU Energy Initiative and launching the EU Africa Partnership for Energy.<sup>19</sup>

## European Parliament

The European Parliament adopted a resolution in 2008 related to the Global Climate Change Alliance (GCCA), calling on the Commission to urgently develop ambitious complementary policy initiatives, particularly in the field of sustainable use of natural resources and mitigation technology cooperation, where financial needs widely exceed what is provided for by the GCCA at present.<sup>20</sup>

## EU Council: The 2009 Czech Presidency

Under the Czech Presidency of the EU in 2009, an informal meeting of EU Ministers for Development Cooperation took place in Prague, at which access to sustainable sources of energy at the local level in developing countries was an important agenda item. As a follow up to this informal meeting, the Council adopted conclusions on access to sustainable energy sources for developing countries, which identify the following as main energy challenges:

- ensuring energy security and sustainability for all
- cutting down greenhouse gas emissions
- helping developing countries to have access to sustainable energy services

The Council conclusions emphasise that local solutions need to be supported by engaging local actors in charge of energy development, the private sector (in particular small and medium-sized enterprises [SMEs]), local micro-finance institutions and civil society. The EU should enhance local

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<sup>19</sup> Council Conclusions on Policy Coherence for Development, available at: [http://www.consilium.europa.eu/uedocs/cms\\_Data/docs/pressdata/en/gena/97179.pdf](http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/gena/97179.pdf) (accessed 10 December 2009).

<sup>20</sup> European Parliament Resolution of 21 October 2008 on building a Global Climate Change Alliance between the European Union and poor developing countries most vulnerable to climate change (2008/2131(INI)), available at: <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P6-TA-2008-0491+0+DOC+XML+V0//EN> (accessed 10 October 2009).

capacity for renewable energy systems and services. In relation to financing, appropriate models for joint financing with the private sector must be found; e.g., the Clean Development Mechanism (CDM) was highlighted by the Council as an important source of additional funding for renewable energy projects.

### **European Parliament: The position of the EU leading up to COP-15**

In the context of the Copenhagen Summit on Climate Change held in December 2009, the European Parliament adopted a resolution that emphasised the responsibility of industrialised countries to provide sustainable and predictable financial and technical support to developing countries. In addition, the European Parliament insisted on financing climate change measures taken by the Member States. The European Parliament stated that the EU should make a financial contribution to developing countries' mitigation and adaptation efforts, which should not be less than € 30 000 million per annum by 2020.

### **ACP-EU Joint Parliamentary Assembly**

At the ACP-EU Joint Parliamentary Assembly (JPA) in Luanda, Angola in November 2009, much attention was paid to climate change and developing countries. In a motion for a resolution on climate change, the JPA called for additional funding to ODA to deal with climate change. The EU's energy policy in the context of ODA has been given increasing attention under subsequent presidencies, as well as by the European Parliament and the ACP-EU Joint Parliamentary Assembly. The importance of renewable energy (and, therefore, the relevance of investment in renewable energy) in the context of ODA has been recognised, alongside the need for funding for adaptation and mitigation to climate change to be additional to ODA.

# 5. EU Aid Programmes to Support Energy

The European Commission has various specific programmes focusing on energy, of which some focus particularly on renewable energy.

## **EU Energy Initiative for Poverty Eradication and Sustainable Development**

The EU Energy Initiative (EUEI) for Poverty Eradication and Sustainable Development was initiated in Johannesburg at the World Summit for Sustainable Development in 2002. The goal of the EUEI is to contribute to providing access to energy and especially to contribute to halving the number of people in extreme poverty by the year 2015.<sup>21</sup> The initiative aims to:

- Raise political awareness among high-level decision-makers
- Encourage coherence and synergy between energy-related activities
- Attract new resources from the private sector, financial institutions, civil society and end-users

According to the European Commission, the initiative has become an “important framework for policy dialogue with developing countries and other partners”.<sup>22</sup>

The EU Energy Initiative (EUEI) is financed from the EDF and focuses particularly, but not exclusively, on Africa, aiming to clarify the energy need and to find new resources for energy programmes. A contribution of €200 million has been made through this programme in the form of the Energy Facility (EF) of the 10th EDF, which has as its main objective to increase access to energy services in rural and peri-urban areas while fighting against climate change.

## **Environment and Natural Resources Thematic Programme**

Energy is covered by the Environment and Natural Resources Thematic Programme (ENRTP), which receives the second-least amount of funding of the five thematic programmes in the Development Cooperation Instrument. The overall funding available for the ENRTP is €853.9 million for the period 2007 to 2013 (of which €450.1 million is available for the period 2007 to 2010).

Sustainable energy is included in this sector along with four other priorities. Under the programme the implementation of specific initiatives for sustainable energy is promoted. The ENRTP allocates €115.4 million or 25 per cent of the total funding to Priority Five:

*...broadening the options as regards sustainable energy, in particular by developing a legislative and administrative framework which favours investments and businesses, and also by stimulating international cooperation.*<sup>23</sup>

Specific initiatives under the programme include:

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<sup>21</sup> The EU Energy Initiative, available at: [http://ec.europa.eu/development/policies/9interventionareas/waterenergy/energy/initiative/index\\_en.htm](http://ec.europa.eu/development/policies/9interventionareas/waterenergy/energy/initiative/index_en.htm) (accessed 10 December 2009).

<sup>22</sup> European Commission. (2008). *European development cooperation in infrastructure*, p.24.

<sup>23</sup> *Environment and Sustainable Management of Natural Resources Thematic Programme*, available at: [http://ec.europa.eu/europeaid/how/finance/dci/environment\\_en.htm](http://ec.europa.eu/europeaid/how/finance/dci/environment_en.htm) (accessed 10 December 2009).

## Global Energy Efficiency and Renewable Energy Fund

The Global Energy Efficiency and Renewable Energy Fund (GEEREF) was launched in October 2006 and links the need to create greater access to energy in developing countries with efforts to combat climate change and air pollution. It promotes the deployment of environmentally sound technologies. In cooperation with Germany and Norway, the European Commission has committed about €110 million to the GEEREF over the period 2007 to 2011, and it is envisaged that further financing from other public and private sources will be forthcoming. GEEREF is managed by an investment committee of delegates representing its shareholders and industry experts. It is advised by the European Investment Fund and the European Investment Bank. GEEREF gives special emphasis to serving the needs of the ACP. It can also support regional funding in Latin America, Asia and EU neighbouring states. Priority is given to investment in countries with policies on energy efficiency and renewable energy that are conducive to private sector engagement. The Fund is registered as Official Development Assistance (ODA) by the OECD DAC.

## Global Climate Change Alliance

Launched in 2007, the Global Climate Change Alliance (GCCA) is a global alliance with the developing countries most vulnerable to climate change, i.e., least developed countries (LDCs) and small island developing states (SIDS). The aim is to help LDCs and SIDS to prepare for climate change. The GCCA is also a platform for the exchange of views between the EU and these countries, especially aiming at the integration of climate change into national development strategies and development cooperation.

## EUROSOLAR programme

The EUROSOLAR programme in Latin America aims to promote the use of renewable energy sources in the poorest countries in Latin America to improve living conditions and combat poverty, particularly among indigenous groups. Through the programme, those in the poorest rural areas without access to the national grid can access a source of electricity generated by sun or wind. The EC's total contribution to the programme is €24 million, with additional funds to come from the governments of the eight countries involved in the programme (Nicaragua, Honduras, El Salvador, Paraguay, Bolivia, Ecuador, Guatemala and Peru).

## COOPENER

COOPENER started out as a response to the Johannesburg Renewable Energy Declaration, which was financed under the EUEI. The COOPENER programme ran until the end of 2006 followed by COOPENER II, which is financed under the EU's financing instrument, the ENRTP, from 2007 to 2013 instead of the EUEI. COOPENER was implemented around two main themes:

- Energy policies, legislation and market conditions for enabling poverty alleviation in developing countries to strengthen the existing local capacities in the fields of energy policy and regulations, to assist local, national or regional energy policy makers and regulators to create favourable market conditions for the provision of energy services;
- Strengthening local energy expertise in developing countries to promote and support initiatives in developing countries, which will help to build a critical mass of human capital with up to date knowledge and expertise in energy policy making, energy regulations, energy planning and project financing.<sup>24</sup>

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<sup>24</sup> *Intelligent Energy EU (2007). COOPENER: Energy services for poverty alleviation in developing countries, [http://ec.europa.eu/energy/intelligent/library/doc/ka\\_reports/subsaharan\\_africa.pdf](http://ec.europa.eu/energy/intelligent/library/doc/ka_reports/subsaharan_africa.pdf).*

In Sub-Saharan Africa, COOPENER was funding 24 projects on a) Rural energy in general and rural electrification in particular, b) Energy for households, biomass and substitutes, c) Strategies and policies for the sector, both at the national and regional levels, d) Capacity building, and e) Energy and the academic and private sectors. The European Commission funded about 50 per cent of all the 24 projects on the COOPENER programme for Sub-Saharan Africa. However, COOPENER I was more or less only a funding instrument, and, despite the great investments, energy access rates in Africa remained low. By introducing COOPENER II for 2007 to 2013, the European Commission changed its priorities to focus on practical on the ground infrastructure development that will address energy access issues. Furthermore, the COOPENER programmes are aimed at eradicating poverty. Under COOPENER II, specific objectives are to:

- Develop institutional support and technical assistance
- Creating a favourable legislative and policy framework to attract new business and investors in Renewable Energy and Energy Efficiency
- Enhance role of energy as a means of income generation for the poor
- Encourage regional cooperation<sup>25</sup>

COOPENER II was launched under the Intelligent Energy for Europe Programme with a budget of €17 million, and is providing financial support to about 40 projects, of which most are being implemented in Africa.

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<sup>25</sup> *European Union Energy Initiative (2006). Update on EUEI related instruments, [http://www.gfse.at/fileadmin/dam/gfse/gfse%206/PLENARY\\_VIII/2.\\_EU\\_EC\\_GFSE-6\\_Presentation\\_Rene\\_Karottki.pdf](http://www.gfse.at/fileadmin/dam/gfse/gfse%206/PLENARY_VIII/2._EU_EC_GFSE-6_Presentation_Rene_Karottki.pdf).*

# 6. EU Financial Allocations for Energy in Developing Countries

## Lack of recording of allocations to renewable energy

The organisation of sectors relevant to energy differs in the EC and the OECD DAC. Neither DAC or OECD DAC record renewable energy specifically.

The European Commission does not separately record spending on either sustainable or renewable energy. Allocations made to renewable energy are recorded (but not specifically itemised) under the sector for economic infrastructure and services (the infrastructure sector), which is comprised of four sub-sectors: transport, water, urban development and energy. Renewable energy comes under the sub-sector for energy. The OECD also lists energy under 'economic infrastructure and services', which does not include water, but does include transport and storage, banking and financial services, business development and communications.

In any case, given that renewable energy is not recorded, it is difficult to determine the allocations made by the EU to renewable energy in ODA.

## EC spending on energy as part of infrastructure sector

Total spending under the infrastructure sector was €12.7 billion from 1995 to 2006, of which 6.5 billion was allocated to transport and 1 billion to energy. Of the total energy spending, the Commission estimates that 13 per cent is allocated to renewable energy (a total of €135 million for the period 1995–2006).<sup>26</sup>

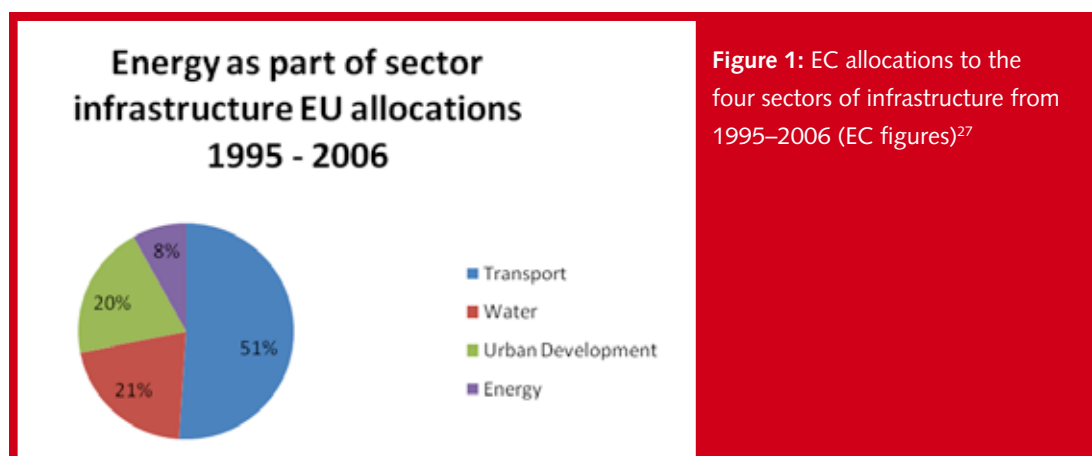


Figure 1: EC allocations to the four sectors of infrastructure from 1995–2006 (EC figures)<sup>27</sup>

<sup>26</sup> European Commission. (2008). *European development cooperation in infrastructure*, pp. 26–28.

<sup>27</sup> *Ibid*, compiled by EEPA.

## Energy versus transport

In 2008, the European Commission's official energy policy was based on the assumption that:

*...both oil and gas are expected to increase considerably in the energy mix in developing countries.*<sup>28</sup>

The reason for this expectation was the increased use in the transport sector, where, according to the Commission, "for the time being alternatives are limited".<sup>29</sup> However, OECD DAC figures show a declining trend in allocations to transport for the years 2005 to 2007 and an increasing trend in allocations to energy.

**Table 1:** EC allocations to the four sectors of infrastructure 2005–2007 in million Euros (OECD DAC figures)<sup>30</sup>

Sector	EC spending (million Euros)		
	2005	2006	2007
Africa			
All EC aid*	11,355.20	12,533.60	13,373.40
Of which: Total EC aid sector allocable aid**	7,838.90	9,184.60	9,793.00
Of which: Economic infrastructure and services sector	1,940.60	1,662.20	1,881.20
Of which: Energy	364.90	533.40	504.90
Transport	1,221.70	1,099.00	940.40

\*All EC Aid is all EC aid.

\*\*Total EC aid sector allocable is all aid that is allocated to a particular sector.

Table 2 shows a decreasing trend in proportional allocations to energy and transport combined, as well as for the total of economic infrastructure and services. Energy is the only sector that increased in proportional terms from 2005 to 2007.

**Table 2:** EC spending on the four sectors of infrastructure 2005–2007 as a percentage of total ODA (OECD DAC figures)<sup>31</sup>

Sector	EC spending as a % of total ODA		
	2005	2006	2007
Energy	3%	4%	4%
Transport	11%	9%	7%
Total of energy and transport combined	14%	13%	11%
Total for sector economic infrastructure and services	17%	13%	14%

The latest figures for 2008 again show a decline for energy to 3 per cent of total ODA commitments and disbursements, whereas transport has increased to 11 per cent of total ODA commitments and 10 per cent of disbursements for 2008 (see Table 3). The total for economic infrastructure and services in 2008 was 15 per cent of total ODA commitments and disbursements.

<sup>28</sup> *Ibid*, p.26.

<sup>29</sup> *Ibid*, p.26.

<sup>30</sup> OECD DAC Creditor Reporting System (CRS). figures, compiled by EEPA, 2 December 2009.

<sup>31</sup> OECD DAC CRS figures, compiled by EEPA, 2 December 2009

**Table 3:** EC commitments and disbursements for energy and transport as a percentage of total ODA in 2008

Sector	EC commitments and disbursements as % of total ODA	
	Commitments	Disbursements
Energy	3%	3%
Transport and storage	11%	10%
Total economic infrastructure and services	15%	15%

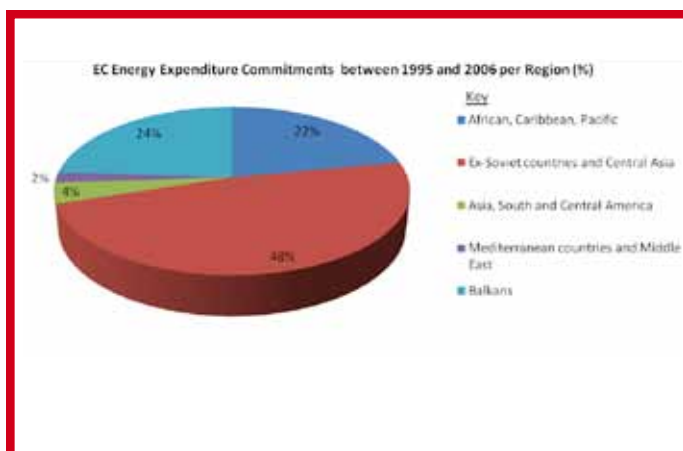
The figures show consistently low allocations to energy (3–4%) compared to allocations to transport of between 7 and 11 per cent.

### Estimates of allocations to renewable energy

The European Commission estimates that 13 per cent of allocations to the energy sector are allocated to renewable energy. This works out as 0.2 per cent of the total ODA budget allocated to renewable energy in 2008.

### Major part of energy allocations to neighbourhood countries

From 1995 to 2006, the European Commission spent 8 per cent of its funding for infrastructure on the energy sector. The largest part of EU ODA commitments to energy are allocated to the neighbourhood countries of the Balkans, former Soviet Union and the Mediterranean. These regions receive 74 per cent of the total allocation for developing countries in the area of energy. Of the total funding allocated to investment in energy, the ACP countries receive 22 per cent, and Asia and Central America together receive 4 per cent of the total funding allocated to energy.<sup>32</sup>



**Figure 2:** Regional distribution of commitments on energy by the EC (ODA) 1995–2006 <sup>33</sup>

In accordance with the OECD DAC, the EU does not record renewable energy specifically. It is incorporated under the general item of 'energy', which is included as part of the sector for 'infrastructure'. Under 'infrastructure', 'transport' receives the largest amount of funding. With regards to 'energy', the EU neighbouring countries are allocated the most support in this sector. It is estimated that renewable energy receives an estimated 13 per cent of the funding for 'energy'.

<sup>32</sup> European Commission. (2008). *European development cooperation in infrastructure*.

<sup>33</sup> DG EuropeAid. (2008). *European development cooperation in infrastructure*, p. 27.



# 7. Renewable Energy in Country Programmes

## Sustainable energy in EC country and regional programmes

The EC allocates its funding to countries through Country Strategy Programmes (CSPs or country programmes), National Indicative Programmes (NIPs), Regional Strategy Programmes (RSPs) and Regional Indicative Programmes (RIPs). NIPs identify the programmes for EU support in a specific country; CSPs identify the problems that need to be addressed as well as the priorities the EC chooses to address in a particular country; and RSPs/RIPs identify these for regional cooperation. The priority sectors identified in these programmes are called focal sectors, whereas non-priority sectors are called non-focal sectors.

In the research undertaken for this publication, the CSPs of 99 developing countries were analysed in terms of the inclusion of funding for energy and renewable energy as a focal or non-focal sector. The research found that only 15 of the 99 countries included 'sustainable' energy as a focal or non-focal sector, accounting for 15 per cent of all CSPs.

The 99 country programmes selected were from Africa, Asia, Caribbean, Latin America and Pacific regions. The selection ensured that different regions were represented as well as countries of different size and with different economic bases and energy situations. The availability of a CSP was also an obvious criterion. The results of the study are presented below.

## EU Country Programmes in Asia

In general, the EU's country programmes with Asian countries do not reflect the region's great need for sustainable energy. There is little mention of funding outside the ENRTP. Unlike other regions, Asia does not have a regional energy facility, or a renewable energy programme.

Table 4 gives an analysis of allocation on energy in a selection of ten countries in Asia. Of these, five of them had only minimal mentions of sustainable energy: Mongolia, Vietnam, Bangladesh, Yemen and Malaysia. The remaining five had no mention.

**Table 4:** Analysis of EC allocation to energy in selected countries in Asia in million Euros<sup>34</sup>

Country	Location	Energy funding (million Euros)	OECD-DAC economic classification <sup>35</sup>
Vietnam	South-East Asia	160	Low Income
Malaysia	South-East Asia	8	Upper Middle Income
Indonesia	South-East Asia	248	Lower Middle Income
Thailand	South-East Asia	8	Lower Middle Income

<sup>34</sup> Compiled by EEPA from CSPs/NIPs.

<sup>35</sup> DAC List of ODA Recipients: Effective for reporting on 2009 and 2010 flows. OECD/DAC Website. August 2009. Available at: <http://www.oecd.org/dataoecd/32/40/43540882.pdf>, for 2008–2009 Aid Flows, (accessed 5 October 2009).

Country	Location	Energy funding (million Euros)	OECD-DAC economic classification <sup>35</sup>
Laos	South-East Asia	32	LDC
Yemen	Middle East	60	LDC
Bhutan	South Asia	32	LDC
India	South Asia	260	Lower Middle Income
Bangladesh	South Asia	200	LDC
Mongolia	North-East Asia	12	Lower Middle Income

## Vietnam

Vietnam's country programme states that the Government agrees with the development concepts set out in Agenda 21, which includes chapters on controlling emissions by several methods, including increasing energy efficiency and creating "environmentally sound energy systems", and on sustainable development. There is mention of sustainable energy programmes under the EC Regional Strategy Programme and the ENRTP, and also of possible future EC support for sustainable development that could include promoting energy efficient and non-polluting technology with the provision of better energy services for the poor. However, this programme has not been outlined in detail in the country programme and, thus far, remains hypothetical.

## Malaysia and Indonesia

Malaysia and Indonesia are two countries that rely heavily on fossil fuels for energy, especially Malaysia. The Government of Malaysia has not given renewable energy development specific priority in its Energy Plan for 2001 to 2012, and the promotion and implementation of renewable energy remains a central issue. The only Member State that has pledged an individual amount that includes funding for renewable energy is Denmark. There is also an Environmental Cooperation Programme (2003–2006), which covers five focal areas including energy and energy efficiency, but the exact amount of funding is not mentioned.

Indonesia's Ministry of the Environment recognises the potential of renewable energy sources, but the national energy policy is currently focused on the utilisation of non-renewable energy efficiently, effectively and productively, whilst encouraging the use of renewable energy and new technology that helps to reduce the demand for non-renewable energy. Despite this promising stance on sustainable energy use, there are no specific programmes outlined by the Government. As the situation stands, both countries' sustainable energy efforts will be funded only through the ENRTP.

## Bangladesh and Mongolia

Bangladesh and Mongolia are two additional countries relying heavily on non-renewable energy. In spite of Bangladesh's significant natural gas reserves, more than 80 million people still cook and heat with firewood, dung or other primary biomass energy sources, and only 15 per cent of households are connected to the electricity grid. The country programme states that "renewable energy has no commercial significance in Bangladesh because of financial and technical constraints". These challenges are outlined in Bangladesh's Poverty Reduction Strategy Programme, but within the country programme, although various environmental concerns are highlighted and programmes and actions outlined, this same concern does not roll over into sustainable energy. Thus far, renewable energy is only considered as an option, but is not pursued under the current country programme.

<sup>36</sup> Agenda 21, available at: <http://www.un.org/esa/dsd/agenda21/> (accessed 5 October 2009).

Coal is the main source of energy in Mongolia, which has led to severe air pollution. Despite this, there is no outright mention in Mongolia's country programme of sustainable energy, except where the EC states that it will pursue interventions under the ENRTP.

### **Laos and Bhutan**

Some of the country programmes in Asia do contain specific actions and programmes on sustainable energy. Laos is a country with great potential for the development of hydropower – the theoretical potential is estimated at about 18 000 MW – and the EC states in the country programme with Laos that there are horizontal programmes that assess the feasibility of renewable energy for which Laos qualifies. However, the implementation of hydropower has been hindered by the possible adverse environmental and social effects, such as the effect on fisheries, fragmentation of habitats, methane emissions and pre-emptive logging.

Bhutan's first focal sector is the 'Renewable Natural Resources Programme', which has been allocated 60 per cent of the country programme funding. This programme focuses on several issues including using environmentally-friendly options such as hydropower and energy efficient technologies. This is supported by the ENRTP and by several projects on renewable energy with various donors and partners such as Austria and the United Nations Development Programme.

### **Thailand, India and Yemen**

Thailand received €8 million under its country programme, and the full amount was designated to the single focal sector, the development of a Thai-EC Cooperation Facility, which will provide technical assistance in various areas including the environment and natural resources, and energy. There will be additional programmes under the ENRTP. The country programme emphasises that the financing of the thematic activities are additional to the financial resources provided under the NIP and will be carried out by non-state actors.

Similarly, India has also focused on energy. Under the ENRTP, support is given under the broad heading of 'Working upstream on MDG 7: Promoting environmental sustainability, promoting implementation and support for sustainable energy options in India'. Renewable energy is also outlined as an option for rural decentralisation. In addition, the EU-India Energy Panel focuses on sustainable energy with renewable energy and energy efficiency being one of the three sub-working groups.

Yemen lists sustainable energy management as a priority of the Ministry of Tourism and Environment, albeit with no specific programmes or financial allocations. Yemen may also be eligible for additional funds under the ENRTP.

## **EU Country Programmes in Latin America**

### **Energy challenge**

The Latin American regional programme cites energy as one of the challenges to the region's development and points out the fact that the region has performed poorly in terms of energy efficiency (relationship between economic growth and energy consumption) as consumption in the region has increased by 7 per cent (compared to a 20% reduction for OECD countries) from the 1980's to 1999. However, sustainable energy is not listed as a major priority with only one programme mentioned.

The country programmes of the countries in Latin America similarly bear little, if any, mention of sustainable energy. It seems that energy is not a priority for EU cooperation in Latin America.

## Uruguay

Uruguay's country programme contains no mention of sustainable energy. However, it should be noted that, at the time the programme was written, Uruguay ranked third in the Environmental Sustainability Index (ESI, the predecessor of the EPI).<sup>37</sup> Uruguay has since fallen to number 36 on the Environment Performance Index (EPI),<sup>38</sup> and this will hopefully be a consideration in the Mid-Term Review of its country programme.

## Brazil

Brazil similarly makes no mention of sustainable energy in its country programme.

## Colombia, Honduras, Venezuela and Panama

The country programmes for Honduras, Venezuela and Panama do not contain any reference to sustainable energy, although they all outline programmes on sustainable development. In the case of Venezuela, this can be attributed to the fact that Venezuela is a significant energy producer due to its oil resources; however, as this is a non-renewable energy source, its reliance on oil as an energy source and as an economic asset should be addressed.

Honduras relies heavily on fuelwood as an energy source, and this is highlighted in the country programme as an issue to be addressed under the ENRTP, but there is no explicit mention of sustainable energy.

Colombia does mention sustainable energy in the outline of the EUROSOLAR programme; however, Colombia is not one of the eight Latin American countries that benefits from this programme.

## El Salvador, Paraguay and Nicaragua

There are a few country programmes in Latin America that feature sustainable energy. El Salvador's country programme outlines the promotion of sustainable resource management, the development of environmental regulations and standards, and the promotion of more sustainable production and consumption patterns, clean technologies and renewable energy.

Paraguay's country programme mentions that the EU and Brazil are both interested in pursuing dialogue on the environment, including on renewable energy. However, neither country programme outlines any programmes or actions.

Nicaragua's country programme calls attention to Nicaragua's economy being highly sensitive to energy prices and its lack of a comprehensive energy policy, as well as the under-exploitation of renewable energy.

## Mexico

Although it contains few specific mentions of renewable energy programmes, Mexico's country programme mentions an additional donor for renewable energy – Finland. In addition, the country programme notes that actions to strengthen cooperation alliances should be focused on sectors such as energy, the environment, clean technologies and so on.

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<sup>37</sup> *Environmental Sustainability Index (ESI)*, available at: <http://sedac.ciesin.columbia.edu/es/esi/>.

<sup>38</sup> *Environmental Performance Index (EPI)*, available at: <http://epi.yale.edu/Home>.

**Table 5:** Analysis of EC allocation to energy in selected countries in Latin America in million Euros<sup>39</sup>

Country	Location	Energy funding (million Euros)	OECD-DAC economic classification
Venezuela	Andean Community	40	Upper Middle Income
Colombia	Andean Community	160	Lower Middle Income
Panama	Central America	38	Upper Middle Income
Nicaragua	Central America	214	Lower Middle Income
Honduras	Central America	223	Lower Middle Income
El Salvador	Central America	121	Lower Middle Income
Mexico	Central America	55	Upper Middle Income
Brazil	Mercosur and Chile	61	Upper Middle Income
Paraguay	Mercosur and Chile	117	Lower Middle Income
Uruguay	Mercosur and Chile	30	Upper Middle Income

## EU Country Programmes in Sub-Sahara Africa

The country programmes in Africa vary in the attention they give to the issue of sustainable energy. Eighteen per cent of African countries include sustainable energy as a focal or non-focal sector – the second highest inclusion in DCI and EDF regions. However, the attention given to sustainable energy is not consistent across all countries in the region. Although several African countries include sustainable energy as a major priority in their country programmes, there are also several that make little or no mention of sustainable or renewable energy.

### Cameroon, Cape Verde, Congo, Madagascar, Mauritania and the Seychelles

The country programmes for Cape Verde and Congo do not mention sustainable energy at all. Cameroon, Madagascar and Mauritania's country programmes all make minor mentions of sustainable energy, sometimes in conjunction with sustainable development and the management of natural resources (which are mentioned frequently), but no programmes are outlined. The Seychelles, as a SIDS, has limited natural resources and relies primarily on petroleum products, which account for 95 per cent of its energy supply, leaving the Seychelles extremely vulnerable to price fluctuations. Despite the environment being the only focal sector, there is very little reference to sustainable energy. Additionally, the Seychelles does not have any projects for energy under the ACP-EU Energy Facility.

### Ethiopia and Kenya

Ethiopia and Kenya are two East African countries that receive a significant amount of funding. Their country programmes do not feature sustainable energy as a focal or non-focal sector. Ethiopia's country programme stresses that infrastructure (including sustainable energy) has been deemed important by both the Ethiopian Government and the EC. Ethiopia's main power sources are coal, gas, wind power and hydropower. Natural gas and geothermal energy have been identified as potential energy sources based on limited exploration activities. The country programme for Ethiopia states that Ethiopia's water resources will be used to help increase power supply by three-fold over the five years of the country programme implementation period (2008–2013). There is also mention of additional donors (Austria, Italy) subsidising renewable energy efforts, especially hydropower. However, there is a lack of programmes to be implemented.

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<sup>39</sup> Compiled by EEPA from CSPs/NIPs.

There is less focus on sustainable energy in the Kenyan country programme, which mentions an intention to diversify power resources in order to improve electricity supply, but does not specify what alternative energy sources will be implemented. There are several projects being implemented under the ACP-EU Energy Facility, the funding of which will be carried out by the EDF, not under the country programme. It is for this reason that sustainable energy issues and actions are largely omitted from Kenya's country programme, although energy in general is tackled under the infrastructure section.

### **Angola**

Conversely, there are some countries in the region with a significant focus on sustainable energy, despite it not being one of the focal or non-focal sectors. Angola benefits from the COOPENER programme. The Angolan country programme also outlines plans for exploring renewable energy as an alternative to oil as resources begin to become scarce. Recommendations in the country programme to the donor community include promoting renewable sources of energy (solar, hydro-electric and biomass) in rural schools, natural parks and remote areas, with the objective of increasing usage of renewable energy and enhancing the population's access to alternative sources of energy. In addition, donor communities are urged to encourage energy efficiency in the industrial sector and, finally, to foster the development of a market for renewable energy with financial incentives, technical training and the valuation of national potential sources of energy.

### **Tanzania**

Tanzania has an abundance of primary energy resources, but one of the lowest per capita energy consumptions in the world. Firewood and charcoal constitute 90 per cent of the energy supply. Tanzania is also a beneficiary of the COOPENER programme. There is in-depth analysis of the country's energy problems, such as over-reliance on hydropower and over-usage of firewood and charcoal as energy sources, and of actions that can be taken to overcome vulnerability, which to a large extent incorporate sustainable and renewable energy solutions. There are several mentions of projects involving sustainable energy carried out by country programme funds and by other EDF funds such as the ACP-EU Energy Facility.

### **Ghana**

Ghana also benefits from the EF and a number of the projects within COOPENER. Due to the energy crisis Ghana suffered in 2006, alternative sources of energy are of major concern. The country programme aims to promote the efficient use of energy, gradual transition from fuelwood to modern energy (including renewable sources), and regional power sharing arrangements. There is also concern from various stakeholders (NGOs, the Energy Commission, concerned individuals, and so forth) to promote clean energy sources, for example bio-diesel. The country programme also lists the energy recommendations in order of priority with the first being to promote renewable sources of energy (solar, hydro-electric and biomass) in rural schools, natural parks and remote areas, and the second being to promote energy efficiency in the industrial sector.

### **South Africa and Swaziland**

Sustainable energy is highlighted as a major priority for South Africa, the highest energy consumer and greenhouse gas emitter in Africa. The country programme outlines several programmes to increase sustainable energy use and implement technologies, as well as mentioning other donors who focus on renewable energy such as Denmark.

For Swaziland, energy efficiency and sustainable use and the promotion of new and renewable energies are key to its development objectives. Swaziland's PRSP mentions sustainable energy with regard to alleviating environmental degradation. Thus, it is recommended that greater use of

renewable energy systems be strongly supported. There are several programmes towards increasing use of sustainable energy, and increasing rural electrification to reduce pressure on forest resources, outlined by Swaziland's government and in the country programme. There are also plans to explore the viability of bio-energy. Overall, there is extensive mention of the current situation and future programmes concerning sustainable energy.

### Guinea Bissau and Chad

Of the fifteen countries chosen for the country programme review, two mention sustainable energy as a focal sector. These are Guinea Bissau and Chad in West Africa (all the African countries with sustainable energy as either focal or non-focal sector are in West Africa). Guinea Bissau's country programme allocates €26 million to the focal sector of Water and Energy, as the country programme has identified development in this sector as an essential prerequisite for economic and social development.

In Chad's country programme, the second focal sector is sustainable development, based on infrastructure and the rural sector, with a financial allocation of €140 million to infrastructure, which includes the development of energy systems including renewable energy and increased energy efficiency.

**Table 6:** Analysis of EC allocation to energy in selected countries in Africa in million Euros<sup>40</sup>

Country	Location	Energy funding (million Euros)	OECD-DAC economic classification
Angola	Central Africa	227.9	LDC
Cameroon	Central Africa	239	Lower Middle Income
Chad	Central Africa	229	LDC
Republic of Congo	Central Africa	88.9	Lower Middle Income
Ethiopia	East Africa	674	LDC
Kenya	East Africa	399.4	Low Income
Seychelles	Eastern Africa	6.3	Upper Middle Income
Tanzania	East Africa	565.1	LDC
Madagascar	Southern Africa	588.2	LDC
South Africa	Southern Africa	980	Upper Middle Income
Swaziland	Southern Africa	63.9	Lower Middle Income
Cape Verde	West Africa	54.1	Lower Middle Income
Ghana	West Africa	373.6	Low Income
Guinea-Bissau	West Africa	100	LDC
Mauritania	West Africa	158.6	LDC

### EU Country Programmes in the Caribbean

Only one country in the Caribbean includes sustainable energy as a focal or non-focal sector, Trinidad and Tobago. In the other CSPs, sustainable energy is mentioned in varying degrees.

<sup>40</sup> Compiled by EEPA from CSPs/NIPs.



## The Bahamas, Haiti and Guyana

The Bahamas country programme contains no specific mention of any sustainable energy programme or of the current state of sustainable energy use in the islands, despite the focus on the management of the environment and natural resources. Haiti has set energy as a priority in its country programme and renewable energy is mentioned as being of great importance to the region; however, there are no specific programmes.

Guyana is similar in that it doesn't have any specific programmes, but due to spiralling energy costs, and consequent efforts to contain these costs through hydroelectric power and renewable fuel, the use of sustainable energy is featured in the country programme. There are also sections on improving energy efficiency, improving infrastructure including energy and having an adequate energy policy.

## Jamaica, Trinidad and Tobago

Jamaica does not have any specific programmes, but its energy policy is to support the use of renewable energy sources, contributing to energy security based on indigenous supplies and providing sustainable environmental benefits. Sustainable energy is mentioned in the country programme in the section on development of sustainable alternative economic activities in sugar areas. It is suggested that the sugar cane industry may be a potential source of renewable energy for Jamaica.

Trinidad and Tobago's primary natural resources are petroleum, natural gas and asphalt, and the use of these resources has led to significant water and air pollution. The Government is exploring several options to reduce pollution, emissions and oil dependency. These include alternative energy and renewable energy projects; considering policies to reduce carbon dioxide emissions; promoting compressed natural gas (CNG) as an alternative fuel; and banning lead additives in petrol. The country programme states that there is a need for more monitoring and evaluation, and better legislation to promote energy efficiency and alternative energy sources.

**Table 7:** Analysis of EC allocation to energy in selected countries in the Caribbean in million Euros<sup>41</sup>

Country	Location	Energy funding (million Euros)	OECD-DAC economic classification
Bahamas	Caribbean	4.7	No Classification
Guyana	Caribbean	54.4	Lower Middle Income
Haiti	Caribbean	291	LDC
Jamaica	Caribbean	122.9	Upper Middle Income
Trinidad & Tobago	Caribbean	25.9	Upper Middle Income

## EU Country Programmes in the Pacific

The Pacific region benefits from programmes under the ACP umbrella and also has its own partnership with the EU – Pacific Islands Energy for Sustainable Development (PIESD) – which was responsible for the Pacific Islands Energy Policy and Strategic Action Planning in conjunction with the Danish Government under the EUEI for three years. Without a doubt, the Pacific is the leading region in terms of sustainable energy. The country programmes mention sustainable energy

<sup>41</sup> Compiled by EEPA from CSPs/NIPs.



frequently and in detail, and 60 per cent of the countries in the Pacific mention sustainable energy as a focal or non-focal sector.

### Cook Islands, Marshall Islands and Tonga

Three of the countries included in the analysis include energy as a focal sector: the Cook Islands, Marshall Islands and Tonga. High priority is given to renewable and alternative energy development in the Cook Islands' country programme under the focal sector Water and Energy, with an allocation of €2.55 million (85% of the programmable funds). Increased access to renewable energy sources and increasing energy efficiency are some of the recommendations made in the country programme. Increasing investment in future renewable energy infrastructure is also outlined as a way of avoiding rising fossil fuel prices and future purchase and storage problems. It states that non state actors (NSAs) will be encouraged to participate in activities.

The Marshall Islands' country programme also has a single focal sector of Water and Energy and also allocates 85 per cent of its programmable funds to renewable energy. This amounts to €4.5 million. The Government aims to reduce GHG emissions while ensuring sustainable development. Tonga's country programme also has the single focal sector of Water and Energy, and the Tonga NIP focuses exclusively on energy, in particular renewable energy. Programmes and plans are comprehensively outlined, such as the need for the repair of solar panels and installation of renewable energy systems. The country programme also outlines plans to include NSAs and to redefine the objectives and functions of central energy institutions, among other things. Again, the focal sector has been allocated 85 per cent of the programmable funds or €5 million.

### Samoa

Samoa does not include energy as either a focal or a non-focal sector. However, Samoa already has an abundance of sustainable energy sources including solar, wind, biomass and wave energy. The country programme notes that it is important for the Government to find a way of developing these alternative sources and adequately outlines current issues, future possible programmes, plans of action, other donors and other funding options for developing Samoa's sustainable energy sector.

### Papua New Guinea

Papua New Guinea does not include energy as either a focal or a non-focal sector. In addition, energy is barely mentioned in the country programme. The Government's Medium Term Development Strategy does not outline any environmental concerns, and the country programme and other donors fund the activities highlighted in this Medium Term Development Strategy. Furthermore, the country's Environmental Profile does not highlight energy use or sustainable energy as one of its main concerns.

**Table 8:** Analysis of EC allocation to energy in selected countries in the Pacific in million Euros<sup>42</sup>

Country	Location	Energy funding (million Euros)	OECD-DAC economic classification
Cook Islands	Pacific	3.3	Upper Middle Income
Marshall Islands	Pacific	5.8	Lower Middle Income
Papua New Guinea	Pacific	142.3	Low Income
Samoa	Pacific	31.3	LDC
Tonga	Pacific	6.8	Lower Middle Income

<sup>42</sup> Compiled by EEPA from CSPs/NIPs.

# 8. Conclusions

The European Commission still does not appear to give priority to the assimilation of sustainable energy technologies into country strategies, as reflected in the EC's country programmes and aid allocations. It is estimated that renewable energy receives only 0.2 per cent of overall ODA allocations.

Given the EU's size as a major international donor, it is well placed to expand its investment in renewable energy and the Commission should ensure that the proportion of ODA allocated to renewable energy is increased. These are measures that can contribute to international policies to lower CO<sub>2</sub> emissions and that need to be expanded alongside climate mitigation and adaptation strategies, which must be funded entirely from funding additional to ODA. More investment in sustainable energy is necessary in ACP countries and countries in Asia and Latin America.

The EU is bound by various international instruments to make allocations to renewable energy for the eradication of poverty and there are relevant Council Decisions and European Parliament resolutions that reflect this priority. The European Commission has already initiated instruments for the implementation of these policies, and, based on the experience gained through these pilot programmes, a further expansion can now be envisaged.

The European Commission is, therefore, in an excellent position to expand programmes through the revision of the country programmes (CSPs) in the Mid-Term Review to take place in 2010. The need for this is clearly established as only 15 out of 99 country programmes reviewed for this study reflect any investment in renewable energy.

## **Recommendation**

It is recommended that the Country Strategy Papers for the ACP, Asia, and Central and South America be reviewed in 2009 and 2010 to ensure that they focus more on financing sustainable energy and implement a more structural policy for sustainable energy. This structural policy for sustainable energy could increase funds for renewable energy and improve access to renewable energy for people living in the ACP countries, Asia, and Central and South America. To arrive at a fundamental policy for sustainable energy, Member States of the EU, ACP and DCI countries, and other stakeholders, need to act together during the Mid-Term Review of the country programmes to make a fundamental shift towards sustainable energy.



# Annexes

## Bibliography

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## Acronyms

ACP	African, Caribbean and Pacific
ASEM	Asia-Europe Meeting
CSP	Country Strategy Paper (or country programme)
DAC	Development Assistance Committee of the OECD
DCI	Development Cooperation Instrument
EAEF	EU-ASEAN Energy Facility
EC	European Commission
EDF	European Development Fund
EEPA	Europe External Policy Advisors
EF	Energy Facility
EIA	Energy Information Administration
ENP	European Neighbourhood Policy
ENPI	European Neighbourhood and Partnership Instrument
ENRTP	Environment and Natural Resources (including Energy) Thematic Programme
EU	European Union
EUEI	EU Energy Initiative for Poverty Eradication and Sustainable Development
GCCA	Global Climate Change Alliance
GHG	greenhouse gas
GEEREF	Global Energy Efficiency and Renewable Energy Fund
ICT	information and communication technology
JPA	Joint Parliamentary Assembly
LDC	least developed country
MDG	Millennium Development Goal
MTR	Mid-Term Review
NIP	National Indicative Programme
NSA	non state actor
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
PPP	Purchasing Power Parity
RIP	Regional Indicative Programme
RSP	Regional Strategy Programme
SIDS	small island developing state
UN	United Nations



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