



Report on regional/national funding sources

Carlow Kilkenny Energy Agency

- **Summarise the main existing grants/subsidies/incentives for streetlight projects and ESCO companies.**

Sustainable Energy Authority of Ireland

www.seai.ie

Better Energy Grant Funding – 30% grant aid for Public Lighting Projects

The Sustainable Energy Authority of Ireland (SEAI) offers a range of supports to the public sector both technical and financial. The SEAI Better Energy Community grant scheme offers grant aid to community energy efficiency projects. An application is made to SEAI outlining energy efficiency projects (cost, energy savings and payback). These projects are then technically and financially evaluated by SEAI before they are approved. The CKEA have successfully applied for energy grant funding from SEAI over the past 3 years. The projects include a mixture of private, community and SME based organisations such as local authority (buildings and public lighting), hotels, community centres and sports clubs. The funding for public sector organisations is 30% of the overall project cost. The fund is reviewed on an annual basis with the percentage of funding liable to change.

Utility Company Energy Incentives

Energia “Energy Efficiency Funding Scheme” www.energia.ie

Up to 30% Grant funding available for businesses

The energy utilities in Ireland have an obligated energy efficiency target to be reached. This is achieved by purchasing the energy savings (energy credits) from energy efficiency projects from businesses, local authorities, and social housing upgrades. The utility companies offer a grant to customers to carry out energy efficiency measures. Energia are currently the electricity provider for public lighting in Kilkenny County Council. The Energia grant funding would be carried out in conjunction with the Better Energy national upgrade programme.

Sustainable Energy Authority of Ireland

www.seai.ie

SEAI Framework for EPC/ESCO contracts.

The SEAI also has a framework in place to guide public bodies through a project implementation process. The framework is to encourage the development of robust projects which are investment ready for financing entities, such as the National Energy Efficiency Fund. SEAI offer supports to public bodies in terms of technical assistance to guide them through the process. In January 2014, the Minister published Ireland's National Energy Services Framework (NESF) which supports the rollout of energy performance contracting (EPC) to public and commercial facilities across the country. The main aim of the Framework is to develop robust projects that are

investment-ready, stimulating the development of a market for Energy Services Companies (ESCOs) and supporting sustainable employment in construction and professional services. The Framework aims to provide best-practice guidance to public and private sector client organisations when procuring energy services and engaging ESCOs. The NESF explains the process and provides guidance on routes to project development, together with sources of finance and the support available from the Sustainable Energy Authority of Ireland (SEAI) to help develop projects in the public and commercial sector in Ireland.

- **Insurance schemes for ESCOs?**

There is currently no insurance scheme for ESCO's or EPC in Ireland. Irish Public Bodies (IPB) is the insurance provider for the public sector in Ireland. IPB currently offer support to community groups and beneficiaries. The option of investigating the possibility of using such insurance schemes for the purposes of advancing ESCO's will be investigated further.

- **Summarise available EU funding sources for streetlight projects.**

European Energy Efficiency Fund

Fund: €265 million

Grants: 100% grant aid

The European Energy Efficiency Fund is a public private partnership dedicated to mitigating climate change in the European Union. The fund finances small and medium sized projects, especially in the energy efficiency sector. Zarpana Signor interviewed below spoke at the recent public lighting event outlining the advancing of sustainable energy projects for Europe. A fund of €265million was allocated with €100million invested to date on 9 projects including Public Lighting.

European Local Energy Assistance: ELENA

Fund: €30 Billion (until exhausted)

Grants: Up to 90% of eligible costs

ELENA is a European technical assistance facility providing grants to regions and local authorities in order to accelerate their investment programmes in the fields of energy and climate change. The European Commission and the European Investment Bank (EIB) are implementing the ELENA technical assistance facility to help local and regional authorities unlock their sustainable energy investment potential. The ELENA facility aims to boost investment projects in the areas of energy efficiency; renewable energy sources and sustainable urban transport, replicating successful stories from other parts of Europe. ELENA support covers a share of the cost for technical support that is necessary to prepare, implement and finance the investment programme, such as feasibility and market studies, structuring of programmes, business plans, energy audits, preparation for tendering procedures - in short, everything necessary to make cities' and regions' sustainable energy projects ready for EIB funding. Up to 90% of eligible costs can be covered by a community grant, following a selection and award procedure. The facility is funded from the Intelligent Energy-Europe (IEE) programme, and has an initial budget of EUR 15 million for the first year of operation

Cohesion Fund

Duration: 2014 – 2020

Amount: EU28 Budget €68.7billion

The Cohesion Fund will support investments into climate change adaptation, water and waste sectors. Investment into energy is also eligible for support, provided it has positive environmental benefits. The Fund will therefore support investments into energy efficiency and renewable energy. Promote measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change. The fund is managed in Ireland by the EU Structural Funds Division in the Department of Finance.

Council of Europe Development Bank

Duration: Ongoing

Amount: According to Demand

Objectives: Strengthen social integration, manage the environment, support public infrastructure with a social vocation.

A multilateral development bank focusing on social aspects amongst 43 Member States of the Council of Europe. Its scope of action includes various sectors directly contributing to strengthening social cohesion in Europe. All technologies improving living conditions in rural areas are eligible for funding. The CEB is a funding tool set up by the Council of Europe, an intergovernmental organization consisting of 40 European States.

The bank can grant loans to its 40 Member States, to their local or regional authorities and to public or private financial institutions, according to a whole set of precise sectorial, geographical and social factors. It can also grant guarantees or loans via trust accounts that notably provide financing for technical assistance, amongst other things. In some cases, interest-rate subsidies can be granted to finance investment projects with a high social impact in the target group countries.

Horizon 2020

Budget: Global Budget €70.2billion, of which; Secure, clean and efficient energy €5,931 million, Smart green and integrated transport €6,339 million, Climate action, resource efficiency and raw materials €3,081 million.

Energy will play an important role in the Horizon 2020, with almost €5,931 million of funding available for energy projects. The aim of Horizon 2020 is to bridge the gap between research and the market, by for example helping enterprises in developing their technological breakthroughs.

Smart appliances (ICT, domestic appliances), lighting (in particular solid state lighting for street and indoor), equipment (e.g. motor systems, water systems)

Funding mechanism available for streetlight EPC projects amongst others are;

EE-20-2015: Project development assistance for innovative bankable and aggregated sustainable energy investment schemes and projects.

EE-20-2015: Enhancing the capacity of public authorities to plan and implement sustainable energy policies and measures.

Connecting Europe Facility (CEF)

Duration: 2014 – 2020

Amount: €5.85billion (energy infrastructure)

Objectives: The CEF aims at removing financial gaps and network bottlenecks. It is designed to attract private sector investment to infrastructure through a number of financial risk-sharing instruments, including special lending, guarantees and equity investments.

The financial support will be awarded by the European Commission in the form of a grant and through a competitive process. Calls for projects are expected to be organised on a regular basis. All projects will be evaluated by independent experts based on a set of pre-defined criteria. The European Commission, together with an Executive Agency will be responsible for managing technical and financial implementation of the programme.

- **Which innovative financing schemes are in place?**

European Investment Bank (EIB) Intermediated Loans

Duration: Ongoing

Objectives: Favourable loans to financial intermediaries (local banks, investment funds)

The level of the loan depends on size and timing. Eventually, the financial intermediary who provides the loan bears the risk and decides on the conditions. The loan can amount up to 50% of the costs of the funding. The objectives of the loans is to support local and regional authorities and SME's to Environmental sustainability - including supporting competitive and secure energy supply and Action for climate-resilient growth. The Irish banks with energy efficiency loan options could use this fund to loan to SME's in order to support them in progress ESCO/EPC projects in Ireland. The two main Irish banks Allied Irish Bank (AIB) and Bank of Ireland (BOI) have indicated strong support to street lighting projects in Ireland. An interview with AIB is detailed in section 4.1.2.

European Regional Development Fund (ERDF)

Duration: 2014 – 2020

Objectives: The ERDF aims to strengthen economic and social cohesion in the European Union by correcting imbalances between its regions.

ERDF funding helps regions turn these objectives into practical action. The aim of the 2014- 2020 ERDF is to strengthen economic, social and territorial cohesion in the European Union by correcting imbalances between regions. According to the new legislation on the European Regional Development Fund, transition regions and more developed regions will be required to focus the largest part of the fund allocation into energy efficiency and renewable energy, competitiveness of SMEs, and innovation. Less developed regions will be able to devote their allocation to a wider range of objectives reflecting the broader range of development needs.

The mechanism proposed provides that:

At least 80% of resources are focused on energy efficiency and renewables, research and innovation and SME support in more developed and transition regions of which 20% for energy efficiency and renewables. At least 50% of resources are focused on energy efficiency and renewables, research and innovation and SME support in less developed regions of which 6% for energy efficiency and renewables. The ERDF will be managed by the regional/national competent authorities.

- **Are there specific bottlenecks in public lighting projects realized by EPC financial model (ESCO companies) in your country and what are potential solutions?**

In Ireland the main bottlenecks encountered by energy efficient public lighting projects are in relation to the unmetered supply and tariff structure for public lighting. Without the realisation of energy efficiency savings there are currently no incentives for ESCO's to invest in large scale public lighting projects. The local authorities' national representatives are currently in negotiations with a number of the key stakeholders in order to come up with a solution to this barrier. The current state of affairs is that the public lighting is unmetered and can only be billed on a billable wattage per lamp and burn hour basis. There are three burn hour profiles; dusk to midnight (1687), dusk to dawn (4150) and 24 hours tariff. This leads to significant issues in terms of developing public lighting projects in Ireland. The wattage can be changed on the national database for lighting retrofits to LED but this does not allow for trimming or dimming. Another barrier is the ownership of the electricity board's infrastructure, historically electricity network poles were used for the positioning of public lights around the country. These poles are still within the ownership of the electricity network however the luminaire is owned by the local authority.

The traditional maintenance contracts in Ireland are either procured on a per light basis or on a schedule of rates type contract. The maintenance time scale of contracts are short term 1-5 year maintenance contracts. There is a lack of experience to move from traditional type maintenance contracts to an energy performance based maintenance contract in the Irish context. Kilkenny County Council through the Streetlight EPC project is currently investigating the form that the next maintenance contract will take in terms of energy performance. The move to a long term energy performance based contract would move the local authorities away from short term maintenance contract of 1-5 years with built in extensions to a longer term 15 – 20 year energy performance based maintenance contract. A level of thrust and awareness of the Energy Performance contract model would need to be established in Ireland both from a public sector point of view and the ESCO's themselves. This is also being progressed by CKEA through SEAI and Streetlight EPC.

The bottlenecks in terms of financial models for EPC, these are mainly due to the fact that the financial models specified are new to Ireland and have yet to be tested. The EPC/ESCO market in Ireland is very young and therefore does not have the experience in terms of projects implementation. The SDCL fund has identified one of the financial and operational drivers in order to support investment in energy efficient street lighting projects:

- Risk transfer and performance guarantee
- End of life equipment upgrade with planned operation and maintenance rather than reactive
- Improved lighting quality with less down time
- Potential off balance sheet treatment

- **Possibilities for establishing a regional/national fund to provide financing for smaller projects?**

The Irish Government published the Action Plan for Jobs in 2013 and revised it in 2014. The action plan identifies Energy Efficiency as a key sector to create jobs in the Irish Economy. Energy efficiency is identified as one of the disruptive reforms that need to be addressed. Establishing an Energy Efficiency Fund and supporting exemplar projects on energy efficiency to progress the ambition of transforming Ireland into one of the most energy efficient economies in Europe. As a

result of the action plan a national fund was established in Ireland in 2013, the fund was established by the government to support energy efficiency projects. There is currently a fund of available through the National Energy Efficiency Fund. Due to the administration of funding larger projects are desired to be implemented in excess of €2million. The Irish Government has committed up to €35 million for investment in the Energy Efficiency Fund with a view to establishing a fund of over €70 million when matched with investment from the private sector. The Energy Efficiency Fund is managed by SDCL on behalf of the Irish Government.



SDCL have identified the policy drives in Ireland such as; Public sector energy efficiency target, 2017 EU phase out requirements, energy efficiency directive and the National Energy Efficiency Action plans. They have also identified the financial and operational drivers; risk transfer and performance guarantee, end of life equipment upgrade with planned O&M, improved lighting quality, energy reduction and off balance sheet financing.

The Allied Irish Bank (AIB) energy efficiency fund was established to give finance to SME's to invest in energy efficiency projects for their businesses. The fund also allows the bank to fund SME's interested in operating as an Energy Service Company. Bank Of Ireland (BOI) have also expressed an interest in this area.

The local government sector in Ireland is traditionally funded by Central Government with additional funding from local taxation and charges for goods and services. The model of this funding has changed in recent years with the onerous on local government to supplement their own budgets through additional local taxation. The traditional financing mechanism for energy efficiency projects carried out in local authorities is through budget allocations supported in some cases by grant aid. The budget is adopted by the local representatives each year, depending on the local authority an allocation will be made to fund energy efficiency projects. With the financing of local government funding mechanisms changing, it is a prime opportunity to investigate alternative methods of funding energy efficiency projects in Ireland.