

# GUIDELINE ON FINDING A SUITABLE FINANCING MODEL FOR PUBLIC LIGHTING INVESTMENT

Deliverable D.T2.3.3 Best practice guide

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## Case study: guaranteed loans from the Lithuanian Energy Efficiency Fund

### Background:

The Lithuanian Energy Efficiency Fund (ENEF) was established in 2015 by the Ministry of Finance, the Ministry of Energy, and the Public Investment Development Agency (VIPA) of Lithuania. The ENEF channels ESIF finances into the renovation of central government buildings and modernisation of street lighting. For street lighting projects, it provides guarantees for commercial bank loans and decreases municipal costs.

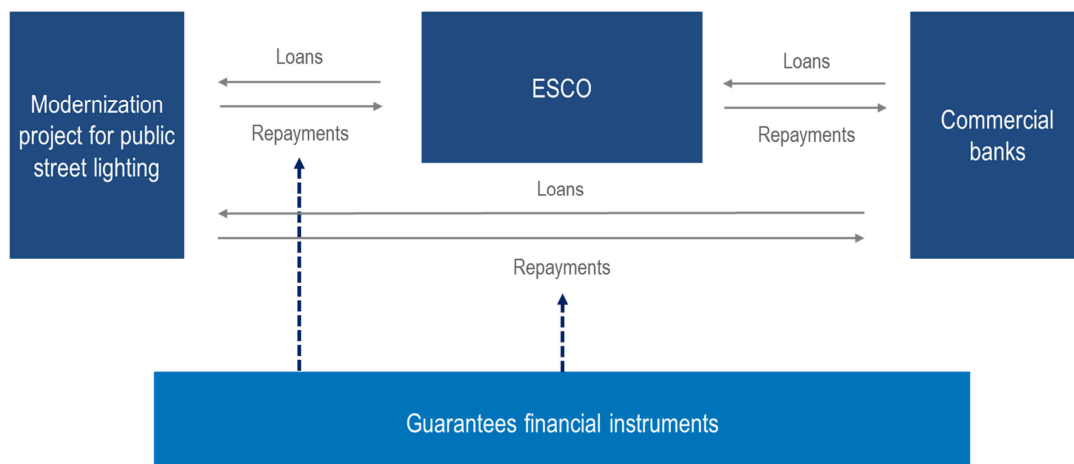
**Project timeframe:** 2015 - at least 2030.

### Key stakeholders:

The ENEF is managed by VIPA, which is wholly owned by the Ministry of Finance. VIPA manages the application process for guarantees, collects fees, and pays compensation. The Ministry is a shareholder and member of the supervisory and management boards of the ENEF (Vaskelienė 2015).

If municipalities and municipal companies are interested in applying for a commercial bank loan or contracting an ESCO, they may apply for an ENEF guarantee. The ENEF assumes these obligations and compensates commercial banks for losses if, in the former case, an applicant cannot repay the bank for the loan and/or loan interest, or, in the latter case, cannot pay the ESCO. Figure 10 illustrates the financial flows in the case study.

**Figure 10: Financing incentives from the Lithuanian Energy Efficiency Fund for municipal street lighting**



Source: Vaskelienė 2015.

### Financing structure:

The fund manages €79.5m, of which up to €14.5m is earmarked for the street lighting financial instrument. For the latter, ENEF offers an 80% guarantee of eligible costs for a timeframe of up to 20 years. The guarantee fee payable by the applicant to ENEF typically depends on the applicant's creditworthiness, but is waived for municipalities and municipal companies (Balčiūtė J. pers. com.).

The public guarantee allows commercial banks and ESCOs to provide more favourable loan and contract conditions to municipalities. In order to apply for the guarantee, the applicants must attach documents including an energy audit or inventory and an investment plan. If municipalities contract an ESCO, the model should comply with the criteria for public-private partnerships defined under the law.



### **Project scope:**

The eligible projects should deliver energy savings of at least 40% and have a maximum payback period of 20 years. Costs can cover modifications including the replacement of lights, upgrades and/or installation of smart or advanced management and control systems, and the reconstruction or installation of distribution and power cabinets between the years 2014 and 2023 (Vaskelienė 2015).

### **Project implementation and outcomes:**

Demand for such funding is very high: by the end of 2015, applications for street lighting funds had reached €95m, well over the €14.5m available through the fund (Vaskelienė 2015). As of April 2017, the fund had approved two street lighting projects, with two more under evaluation and six more in the initiation stage for a 50% investment guarantee from ENEF (Lauruševičienė 2017).

## **3.2. Debt-based financing: issuing municipal bonds**

### **Model overview:**

Municipal bonds are issued by a local government (or their agencies) to raise funds for investment projects. When a municipality issues a bond, it acquires a debt obligation and must pay interest and/or repay the debt in the future. While municipal bonds can be used to finance any type of municipal investment, labelled green bonds are issued exclusively for projects related to sustainability and climate change mitigation. To have a 'green' label, bonds must be certified by an independent institution.

### **Advantages:**

The municipality can raise finances for public projects independently or in coordination with a bond agency. Because bonds generally have low interest rates, it offers capital at a lower cost than do commercial bonds.

### **Disadvantages:**

Issuing municipal bonds may require extensive and costly preparation, such as obtaining a credit rating, acquiring approval from national securities authorities, and consulting with investment brokers. For this reason, many countries have municipal bond agencies, which aggregate debt from multiple municipalities, issue bonds, and sell them in the financial markets. With a high credit rating, agencies can raise capital for municipalities at a lower cost than would be possible if the municipalities issued the bonds themselves. Agencies of this kind are located in Sweden, Finland, France, Denmark, Switzerland, UK, and the Netherlands (ManagEnergy 2017).

### **Projects that can be financed with this model:**

Most municipalities with access to a bond agency can apply this model.

### **Jurisdictions that have applied the model:**

Interest in bonds (especially green bonds) is growing, although bonds are still less common in Europe than in the United States, where they are already in widespread use. The model has been applied successfully in multiple cities in Sweden, where the funding agency Kommuninvest issues bonds to finance projects in local municipalities. Gothenburg, the second largest city in Sweden, was the first city to issue green bonds in 2013 (see the case study below). Paris, Johannesburg, Mexico, Oslo, Vasteras, and multiple jurisdictions in the United States and Canada later followed its example (Climate Bonds Initiative 2017). In the US, the model was implemented in federal and state level programmes with qualified energy conservation bonds (QECBs) as well as in initiatives introduced by individual cities; for example, Detroit and San Diego issued bonds to raise funds for street lighting modernisation (LBNL 2012; Kinzey 2015).