Kellogg-Morgan Stanley Sustainable Investing Challenge 2020

CEESCO – financial innovation to make Central & Eastern Europe's buildings warmer, cheaper and greener

Introduction & problem space

- Buildings produce **36% of EU greenhouse gas emissions**. In CEE, 75% of the building stock must be upgraded to meet EU 2050 emission reduction target
- Energy Service Companies (ESCOs) install energy efficiency equipment in buildings
- ESCOs recoup their investment by taking a **share of energy cost savings** over 10-15 yrs
- Investment is typically financed by 5-10 yrs loans
- The **timing mismatch** between loan maturities and ESCO project lengths mean ESCOs reach their debt capacity quickly and struggle to scale
- Capital access restrictions inhibit growth for end users and ESCOs **to save costs and reduce emissions**

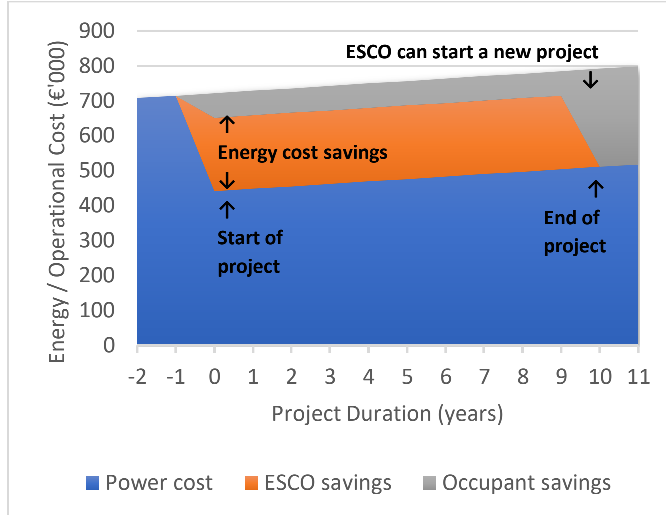
Solution [financial innovation]

- CEESCO is a forfaiting solution, which **purchases energy saving projects' future accounts receivables** at their net present value, less an admin fee
- These up-front funds inject new capital into ESCOs, allowing them to **reduce debt and rapidly scale their businesses** with further energy saving projects
- To finance the forfaiting, CEESCO **issues green bonds against a given group of ESCOs** to investors
- Over an ESCO project's duration, CEESCO will **collect accounts receivables** from the building occupant and settle power bills. With residual cost savings, it will **issue semi-annual coupons** to its bond holders, and earn a margin for CEESCO equity holders

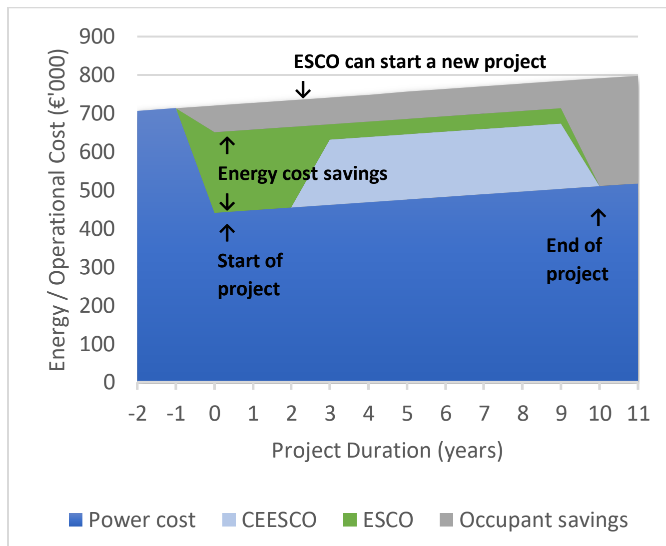
Key product metrics

Lithuania ESCO market size	**€350m**
Initial issue size	**€10m**
Maturity	**15 years**
Number of projects	**10-20**
Energy savings range	**20-55% reduction**
Green bond coupon	**6%, semi-annual**

ESCO model without CEESCO



ESCO model with CEESCO



Macro trends

- GDP growth in CEE is pushing demand for **renovation of old building stock**
- Large volume of inefficient soviet era buildings in CEE with **potential for efficiency gains**
- Energy efficiency is seen as a key component of **energy independence strategy** in CEE region
- New EU regulations for energy efficiency and **carbon taxes** are in the pipeline
- Demand is growing for **green bonds with measurable impact** from European investors
- **Limited financing options** available to ESCOs

Target pilot region - Lithuania

Sources: European Commission, European Environment Agency, Statista, Rensmart

- **Government subsidies** - New repayable subsidies up to 80% of the ESCO capital
- **Non-active local banks** - Relatively small regional banks have no ESCO expertise
- **Rising energy prices** - Growing energy costs will increase ESCO attractiveness
- **Public Private Partnership (PPP)** - One of the most developed legal frameworks in Europe
- **Expertise and connections** - Team has strong knowledge and network in the region

Pilot market & scalability

- CEESCO will initially **target public sector buildings in Lithuania**: hospitals, kindergartens, schools, police and fire stations, administrative buildings, etc. **Lithuania pilot market size – 19.4m sqm of public buildings**
- As per the Energy Performance of Buildings Directive Factsheet, 75% of the building stock is energy inefficient. In the case of **public buildings this is estimated to be closer to 80%** (especially in the target region)
- On average, non-residential buildings consume **300 kWh/sqm p.a.** which translates to **EUR 27/sqm/p.a.**
- After Lithuania, CEESCO will **scale in CEE** with a stock of approx. **348m sqm of public buildings**
- **9 countries** with a total **population of 96m**: LT, EE, LV, PL, CZ, SK, HU, RO, BG

Key partnerships in pilot market

- Ministry of Energy, Ministry of Environment and Public Investment Development Agency (VIPA)
- Established ESCOs and the Lithuanian electric energy association (LEEA)
- Local energy company (Ignitis Group) and suppliers
- EU Energy Efficiency Bodies (EEEF) and European Think Tanks (The European Energy Institute)
- Investors - local commercial banks (SEB, Swedbank) and asset managers (BaltCap, Lords LB)
- Local technical universities (VGTU, KTU)

Sustainable development goals tackled

Category	Risks	Mitigation	Partnerships
Legal	Consistency of ESCO legislation and standards across jurisdictions	Create due diligence process	Law firms ESCO consultants
Quality	Lack of qualified ESCO specialists Risk of low quality ESCO project	Support local knowledge building Ensure ESCO audits and legalities	Energy efficiency associations Law and audit firms
Procurement	Risk of low supply of ESCO projects Risk of measuring the true impact	Create value for local players Ensure access to energy bills	Law firms and ESCO consultants Investors and governments
Financial	Creditability of A/R Risk of low energy efficiency gains	Focus on public ESCO projects Work with the established ESCOs	Public building owners Credit risk management firms
Market	Lack of trust in the local market	Hosting local ESCO seminar and launching media campaign	Local business dailies EU/local energy efficiency NGOs

Roll-out plan

2020	2021	2022	2023	2024
○ Detailed financial modelling ○ Outreach to potential bond buyers ○ Outreach to partners in Lithuania	○ Buying out first A/R in Lithuania ○ Issuing 1st green CEESCO bond ○ Outreach to Latvia and Estonia	○ Adjusting and scaling – LV, EE ○ Issuing 2nd green bond ○ Outreach to Poland, Slovakia and Czechia	○ Adjusting and scaling – PL, SK, CZ ○ Issuing 3rd green bond ○ Outreach to Hungary, Romania and Bulgaria	○ Adjusting and scaling – HU, RO, BG ○ Issuing 4th green bonds ○ Research expansion markets

Team

BORANDA Bianca, Romanian (LinkedIn): 6+ yrs. in capital markets advisory at Chatham Financial in US & Singapore
FRASER Donald, British (LinkedIn): 9+ yrs. in shipping and carbon markets across Asia Pacific
IVANESCU Iustin, Romanian (LinkedIn): 7+ yrs. in debt & equity investments, project and public finance at EBRD
STANKEVICIUS Dom, Lithuanian (LinkedIn): 5+ yrs. in Invest Lithuania (FDI) and startups, focused on fintech sector

Advisors

DRUBEL Jim, Morgan Stanley, US | ***GIBB Alex,*** Investor, LT | ***STARAS Augustas,*** Digital Finance, HK | ***WAHL Hans***, INSEAD | ***MORGAN Tim***, Trilink Global, US | ***REED Chad***, Hannon Armstrong, US

Sources: European Commission, European Environment Agency, Statista, Rensmart