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 yr 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

<table>
<thead>
<tr>
<th>Lithuania ESCO market size</th>
<th>€350m</th>
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</thead>
<tbody>
<tr>
<td>Initial issue size</td>
<td>€10m</td>
</tr>
<tr>
<td>Maturity</td>
<td>15 yrs</td>
</tr>
<tr>
<td>Number of projects</td>
<td>10-20</td>
</tr>
<tr>
<td>Energy savings range</td>
<td>20-55% reduction</td>
</tr>
<tr>
<td>Green bond coupon</td>
<td>6%, semi-annual</td>
</tr>
</tbody>
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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

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

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

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