



Csaba de Csiky

Chairman and Senior Partner
EnerSave Capital

Who we are

EnerSave Capital S.a r. l. is a Luxembourg based partnership that with 5 key business lines:

✓ Financial services :

Corporate finance advisory services relating to energy saving and green energy generation

- ✓ Structuring and placement of Equity and debt market products, Sustainability themed Fund
- ✓ Lead drafter of an "off balance sheet" "as a service" Hybrid EPC contract under H2020 LAUNCH
- ✓ Advisory services to corporates in rollout of "as a service" based propositions

Securitization services

- ✓ Setting up of securitization structures to refinance "ESG & sustainability based cash flows" via Green Bonds

✓ ESG advisory services

- ✓ Consultancy services related to ESG
- ✓ Define and develop clients ESG strategy, ESG implementation and monitoring
- ✓ ESG reporting

✓ EU funding advisory services

- ✓ Assistance to navigate the EU Grant Application landscape
- ✓ Assistance in setting up a consortium and identifying a suitable EU funding opportunity

✓ Carbon solutions

- ✓ Consultancy Service on Environmental Certificates (VCUs, REDD+, I-RECs)
- ✓ Development of Carbon Emission Reduction Projects and Offset Carbon Emissions

EU initiatives H2020 and LIFE

H2020 projects



LIFE projects



EPBD (I)

National Trajectories for Residential Buildings:

- Each Member State to adopt a trajectory.
- **Reduce average primary energy use by 16% by 2030 and 20-22% by 2035.**
- Flexibility for national circumstances in choosing buildings and measures.

Focus on Worst-Performing Buildings:

- **Ensure at least 55% of energy reduction from renovating worst-performing buildings.**

Non-Residential Building Standards:

- Gradual improvement via **minimum energy performance standards.**
- **Renovate 16% worst-performing by 2030 and 26% by 2033.**

Exemptions:

- Member States can exempt certain buildings (historical, holiday homes) from obligations.

Unified Energy Performance Certificates (EPCs):

- Improved EPCs with a common EU template and criteria.
- Enhance information for citizens and facilitate EU-wide financing decisions.

Prioritize Renovations to Combat Energy Poverty:

- Financing measures to prioritize and support renovations, especially in poorly performing buildings.
- Safeguards for tenants against eviction risks from rent increases after renovations.

EBPD (II)

- **National Building Renovation Plans:**
 - Establish plans outlining the strategy to decarbonize buildings.
 - Address barriers like financing, training, and skilled workforce.
- **Building Renovation Passport Schemes:**
 - Implement schemes guiding owners in staged renovations towards zero-emission buildings.
- **One-Stop-Shops:**

Create centralized support for homeowners, SMEs, and renovation actors for dedicated assistance.
- **Phase-Out of Fossil Fuel Boilers:**
 - Gradual phase-out of fossil fuel boilers.
 - Ban on subsidies for standalone boilers from January 1, 2025.
 - Clear legal basis for Member States to set emission-based requirements and aim for complete phase-out by 2040.
- **Sustainable Mobility Boost:**
 - Pre-cabling as the norm in new and renovated buildings for easy access to recharging infrastructure.
 - Strengthened requirements for recharging points in both residential and non-residential buildings.
 - Removal of barriers for the 'right to plug' reality and ensure smart and bi-directional charging.
 - Adequate parking spaces for bicycles, including cargo bikes.
- **Zero Emissions Standard for New Buildings:**
 - New buildings must have zero on-site emissions from fossil fuels.
 - Applicable from January 1, 2028, for publicly-owned buildings and January 1, 2030, for all others.
 - Solar-ready requirements for new buildings, encouraging rooftop photovoltaic or solar thermal installations.
 - Gradual installation of solar in existing public and non-residential buildings starting from 2027 if feasible.

Key numbers - a reminder of the opportunity

- **Buildings are responsible** for approximately **40% of EU energy consumption**, more than half of EU gas consumption (mainly through heating, cooling and domestic hot water) and **36% of the energy-related greenhouse gas emissions**.
- At present, **about 35% of the EU's buildings are over 50 years old and almost 75% of the building stock is energy inefficient**. At the same time, **the average annual energy renovation rate is only about 1% should be in excess of 3%**
- As set out in **the Renovation Wave Strategy**, the Commission aims to at least **double renovation rates by 2030** and make sure renovations lead to **higher energy efficiency and more renewable energy in buildings**.
- The Commission's EPBD proposal (revised version of 2021) was supplemented by additional elements on deployment of **solar energy on buildings as part of the REPowerEU plan in May 2022**.

Some Transition Finance Basics

- **1 trillion = 1,000,000,000,000**
- **1 billion = 1,000,000,000**
- **1 million = 1,000,000**

- According to the former CEO of the Erste Group there are **14 trillion of deposits** at European banks earning very little return – making bank shareholders rich
- EU forecasts that we need annually **300 to 500 Bio per annum** to meet the 2030 objectives
- An average household needs investments of app. 50,000 Euros to make it energy efficient for;
 - Heating, cooling, Photovoltaic, Storage, charging infrastructure
 - This pays for itself from saved energy cost – sorry utilities – on average 12 to 15 years
- There are around 198 Million households across the EU
 - At a 3% refurbishing rate this would be around **5,9 Mio.** households p.a. or **300 Bio** opportunity
- The average household has not got this kind of money – hence it can not pay upfront – **but could pay from savings on his utility bills**
- **This calls for the creation of funded solutions to be distributed to retail & institutional investors**

EPBD PRESSURE COOKER

- Real Estate owner are under pressure from the EU and from their own investors to improve their building stock
- Easier said than done at a time when due to high vacancies rates real estate values are falling
 - Building owners are overstretched
 - Banks unwilling to lend
 - And a wave of re-financings is starting and some owners have issues here
- Whist companies are trying to get employees back to work in offices or at least in a hybrid fashion
 - They need to have the best and nicest and environmentally friendly offices
- Employees on the other hand are sensing an upper hand and want to work for the best employer which includes the most environmental friendly and offices with the highest comfort level
- The race to get fit for net Zero is on - but
 - Upward Price pressures due to bottle necks in the installation sector and inflation

How can the industry respond

- Whilst the EU expectations are up – Realities are that sales of heat-pumps are down – **Why ?**
 - The easy client – those with money and who are environmentally conscientious – have acted
- Large real estate owners are having issues with servicing their mortgages – which is mandatory
 - They don't have spare funding or lending lines which they could draw upon to pay for building upgrades
- The private sector, with inflation biting into the disposable income and interest rates up - willingness to buy is down

What to do ?

1. We need to make the energy transition “sexy” this is a joint communications effort
 - Individuals and companies need to see this as a priority and something to “aspire too”
 - No-one wants to be seen as a loser – car industry is a master in this
2. We need to take pages from the car industry text book
 - Make it easy for end clients (subject to credit quality) to get funding
 - Banks don't understand the risks as well as well as the sector itself does
3. We need to educate the investor base – retail and institutional
 - No investor wakes up in the morning and says “I want to invest in heap pumps”
 - We collectively need to show them why this is good from a “risk reward” stand point & “sustainability”

The Opportunity

Thinking in Solutions and not Product

- A sector thinking “sale at point of breakdown” needs to think “zero upfront cost energy efficiency sale”
 - This calls for funded solutions
 - Answer is not “go and see your banker” but provide the “funding as part of the sales process”
- Heat Pumps if not combined with PV are only a half-way-house
- This calls for new partnerships and business models
- Rethinking the distribution channels away from (but still maintaining these key channels) supplying via
 - Whole sellers
 - Retailers
 - Both of them ill suited for “funded solutions”
- Creating & Educating new distribution channels and collaborative business models
- Thinking in distributed energy
- Community energy

Funded solution solving the Balance sheet issue

- ESCO's think funded solutions and combining product, but for most the "balance sheet" is a limitation
 - This is an issue for new borrowing
 - Or they need to find new equity
 - Finally small ESCO's could pursue a cross border merger strategy thus having a larger balance sheet
 - Whilst maintaining their operational independence
- The industry, due to their "balance sheet" have the following of the banking sector, and could raise
 - Millions for the transition, but
 - HVAC industry very conservative
 - Sceptical to new business models
 - They know perfectly well
 - Working capital
 - Supplier finance (their own suppliers & their clients) this is 30,90 max 180 days finance
 - Long term end client finance is the unknow territory and is above 5 mostly 10 to 15 years

Role of the Institutional investors

Investment Landscape:

- To reach net zero emissions by 2050, annual clean energy investment worldwide will need to more than triple by 2030 to around \$4 trillion (IEA report).

Government Realization:

- Governments acknowledge the need for substantial capital post-Covid19 and Ukraine situation.
- Emphasis on leveraging private capital due to strained public finances.

Institutional Investors' Role:

- Institutional investors (€70 trillion AUM) crucial for large-scale funding.

Current Allocation Challenge:

- Limited institutional investment in energy efficiency projects beyond specialist funds.
- Hesitancy due to lack of expertise, especially in ESCo processes & technology.

Investor Concerns:

- Lack of suitable investment products matching risk/return profiles for clean energy projects.

Addressing Challenges:

- Public-private efforts: scaling green bonds, creating risk-mitigating finance mechanisms, and co-investment structures.

The key for scaling energy saving measures

- ✓ Needs to be implemented and financed by a third party
- ✓ Needs to be off-balance sheet
- ✓ Needs to pay for itself
- ✓ Needs to be easily financeable : standardization

Institutional Investor Logic



- ✓ minimum issue size of € 100 Mio (preferably € 250 Mio.)
- ✓ a minimum ticket size they would be able to subscribe to is of € 5 Mio.



- ✓ preferably a credit rating (investment grade is BBB-)
- ✓ a green bond certification
- ✓ a listing



- ✓ preferably a tenor of 5 to 10 years.
- ✓ from the € 5K to 100K measure to a € 100 to 250 Mio Note which investor are willing to subscribe to, **there is a large gap.**



Such gap we will only be able to bridge if we are able to co-mingle assets generated by various project developers & or industrials within a standardised legal framework.

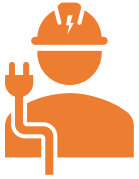
Silos of finance

- **Specialist funds** - AUM 5 to 7 Bio.
 - Understand the Energy transition assets and have a Buy and hold strategy
- **Banks** - Have specialised departments for energy transition with comparatively small asset allocation i.e. BNP 100 Mio
 - Not always familiar with the technology and Project finance lies outside the core focus of banks.- banks think in collateral
- **Pension funds** - Due to regulation are limited to invest into certain asset classes
 - “sustainability” focused asset resulting from on energy transition need to be pooled into listed and rated bonds of high liquidity
- **Insurance Companies**
 - Could explore private equity for energy transition assets, but need to set aside large capital reserves to support Private equity
- **Sharia Compliant Finance** - Not very much developed in Europe
 - Ideally placed for the energy transition as the base of reward is a sharing of profits between investors & promoters.
- **EU funded entities**
 - Need between 30 Mi. To 50 Mio. Euro tickets and single A rating and above of 10 Mio. Tickets
 - Need for a strategic shift : higher risk appetite
- **Crowd funding** - Latest EU regulation allows for up to 5 Mio. offerings
 - The crowd likes to fund local projects and this engages the “retail clients”
 - However lacks tax incentives to further engage especially for equity offering (UK has good mechanics in place)
- **What the energy transition needs are bankers like S.G. Warburg the inventor of the “Euromarket” or J.P. Morgan who lead the “railway consolidation” or Michael Milken the “junk bond king” financing the merger boom of the 1980’s in the US**

Opportunities we see

1. Major Utility in Southern Europe 500k clients wants to provide decentralized energy solutions
 - Heat & cooling pumps
 - PV
 - Storage
 - Charging infrastructure
2. Infrastructure Investor are looking for 25 Mio. ticket opportunities
3. Institutional investors are looking for bonds “ex ante” or “ex post” basis
 1. Minimum volume 100 to 250 Mio
4. Buildings as the grid
 - Integrated solutions
 - Due to complexity call for **“as a service”**

The key to “off balance sheet” is “As a service”



Typically, contractors sell a technology



In the “as a service model” contractors sell the output of the new installations e.g: Lumen per kWh



The contractor/installer has the responsibility of the installation, design, maintenance and operation of the equipment to ensure it’s proper functioning



If there is non-performance the client has the right to withhold payment , whilst at the same time should the client not pay, ESCo has the right to stop the supply of the services

“Off-balance sheet” Is key for the real estate sector



REDUCED RISK



**MAINTAIN BORROWING
CAPACITY**



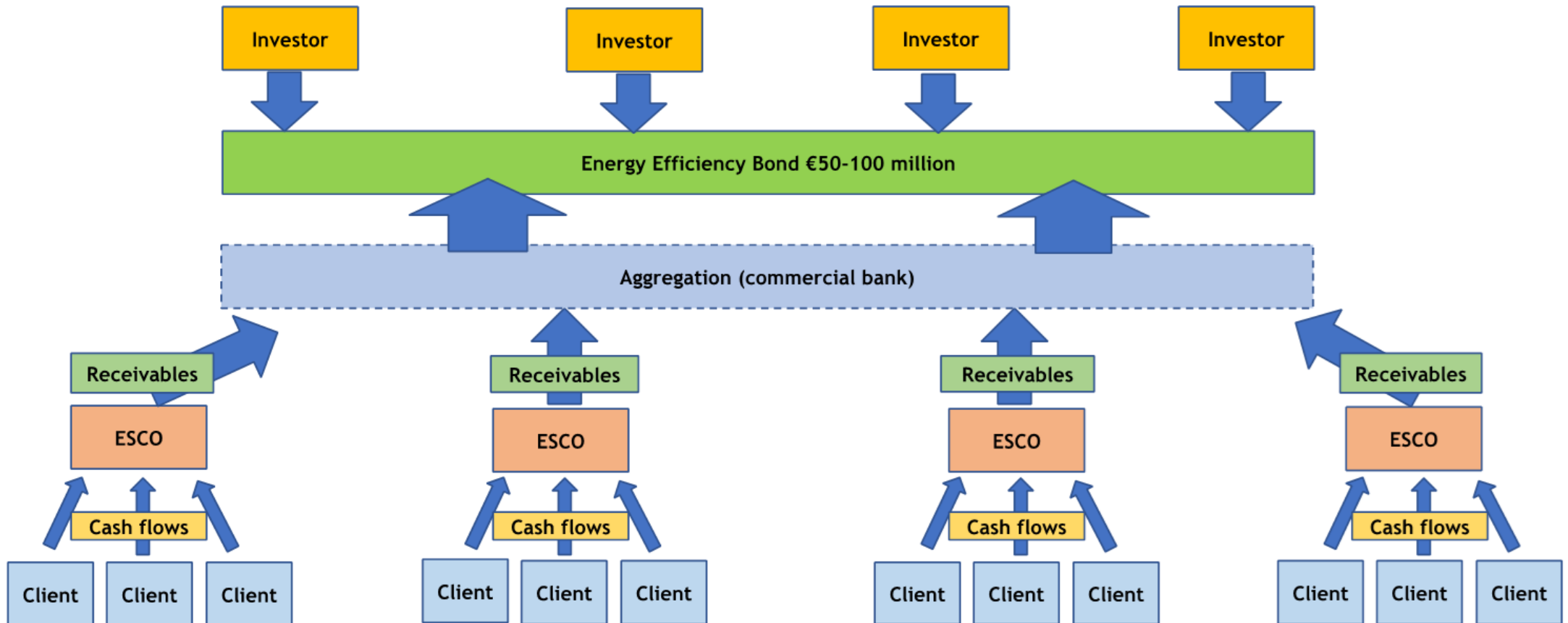
**MAINTAIN GOOD
RELATIONSHIP WITH
SUPPLIERS AND LENDERS**



**MAINTAIN STRONG
FINANCIAL NUMBERS
AND RATIO**

Solutions for smaller Players

Aggregation of energy efficiency projects



Key benefits of securitization for ESCo's

- ✓ The “As a service” aspect is for many companies which are having high debt levels, gearing or are limited by lenders covenants, to take on further debt, to sell their goods.
- ✓ Ability for sale of receivables removes receivables from the contractors books, thus reducing credit exposure, and freeing up capital for the core business
- ✓ At the same time it means the contractor can focus on their core business activities, and not be preoccupied with arranging the finance to do so
- ✓ Receivables represent the investment plus the contractors commercial margin, thus as soon as the receivables are sold, the contractor can take on new business and scale up
- ✓ Securitization vehicles in Luxembourg are taxed at a nominal rate, rendering profits “de facto” tax free
- ✓ Securitization creates a ‘conveyor belt’ of projects: you can support the energy efficiency market growth and create new business opportunities

How we can help

The past 6-month saw a spur in interest by the industrial sector to set up funded solutions, key trends are;

White label solutions

- Industrialist branded
- EnerSave provides regulatory framework, manage the credit process & administration - invisibly
- Educate the sales force in the funded solution – best solution is a core team of experts
- Interact with the funding sector
- Risk and rewards are with the industrialist
- Fee basis with a success fee element

Joint Ventures

- A collaborative development whereby we cover the above elements however risk and rewards are shared

Outsourced

- EnerSave does everything under its own label
- Industrialist becomes a silent capital start up-partner for a limited period
- We support the sales force in the sales process

Green Bond issuance

- Ex-ante solution raising funding from investors for a given project
- Ex-post solutions – securitizing cash flows and selling them to investors

Crowd funding



EnerSaveCapital

Thank you!

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