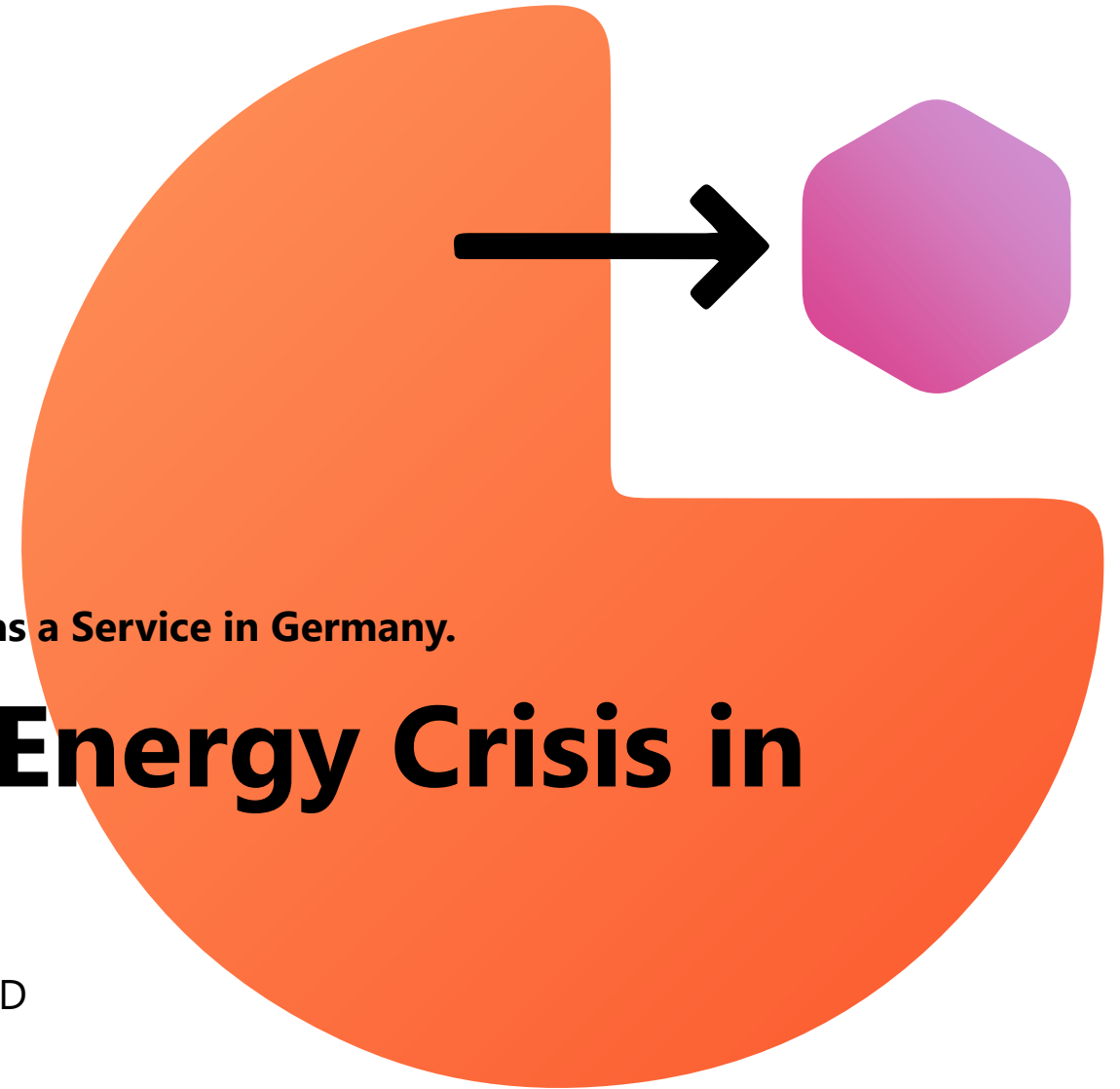


DENEFF EDL_Hub- The Strong Voice for Decarbonization as a Service in Germany.

Can ESCOs solve the Energy Crisis in Germany?

Global ESCO Network | 6. November 2022 | Rüdiger Lohse, MD



First things first: to answer your question...

Germany's ESCO Market is appr. 10 bn € per year...however...

...the potential is actually 60-80 bn € per year...

...if the potential would be focused on the building sector, the refurbishment rate could be increased by almost 0,9%...

Yes... we can contribute significantly....

...so the answer is **YES WE COULD**... if policy lets us!

?

In the following we give you insights in our ESCO market in Germany, on **hurdles** and **drivers**.



**Energy Services Germany
2022**

Dramatic policy failures in the past 20 years have to be corrected in short time now! ESCOs have started to adapt to new demands.

Major Policy Events

- **EnergyEfficiency Act** to create robust framework for energy efficiency and energy services in DE
- **Energy in Buildings Act:** thriving for binding energy targets for newly built and building stock refurbishments and prioritization of worst performing buildings- from 2024 on fossile heating systems will have to be replaced by heating systems based on 65% RE.
- **Heating Design Act:** Setting up structures for the decarbonization of the heating system (50% by 2030, 100% by 2045)



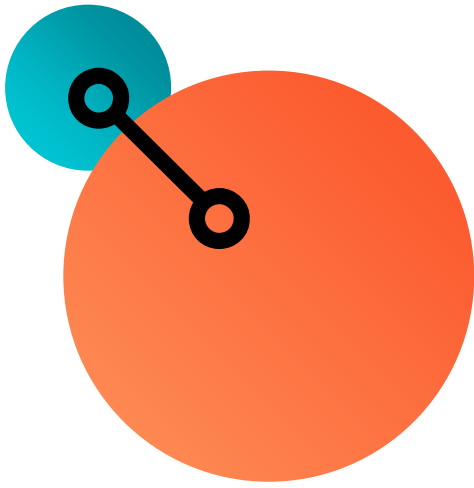
Impact on Energy Services in Germany

- Level Playing field still not existing for energy services in the housing sector.
- Instead of gas based CHP ESCOs have started 2022 to dive into the electrification of the heating sector. The technical scope in these projects includes HVAC and building insulation measures which has not been the case in energy supply contracting before. This increases also the demand for finance by factor 2-5.
- ESCOs have started to increase consulting business in their portfolio. In the past this has been mostly cost-free acquisition effort.



Disruptive Changes in the German Energy Market challenge traditional business models. ESCOs only have the option of adapting the new rules of the game or disappearing form the market in rapidly shrinking niches

DENEFF EDL_HUB Supports Members in This Once-in-a-Lifetime Disruptive Change Process



Society:
Decarbonization has become mainstream



Policy has called for 2045 Zero Carbon Germany



Customer needs: simple approaches for complex challenges



B2B demands One-Stop-Shops for complex strategic challenges



Digitalization: Big Data to enable AI based value prepositions



User-Centric-Business Models require agile working environment



Meet the target by combining „Efficiency First“ and Renewables



AI to increase accuracy and cost-benefit optimized solutions

DENEFF EDL_HUB: Innovation Plattform and Association with major German and EU ESCOs on Board- making the ESCO case since 2020



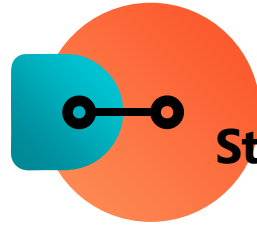
DENEFF EDL_HUB: Mission and Vision



Policy HUB

Contribute Strongly to Create Level-Playing Field for ESCOs in Germany:

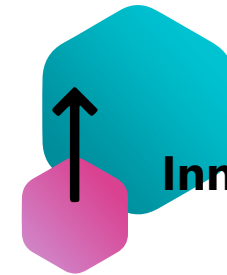
- **Policy Agenda Settings in EU and DE**
- **Access** to funding and subsidies
- **Policy** regulations to create a framework which enables ESCOs to put in place significant investments



Stakeholder HUB

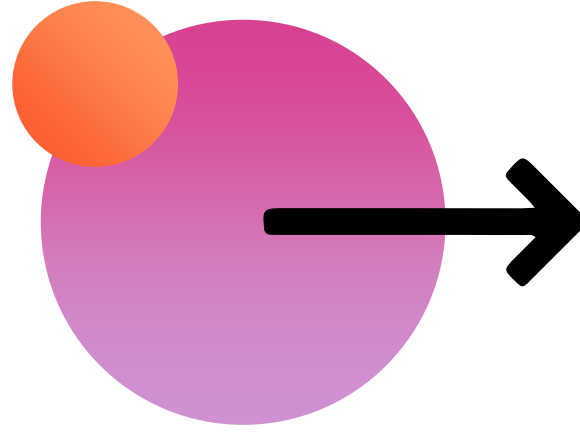
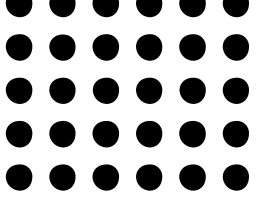
Creating Interaction Between Stakeholders

- **Connecting** ESCOs, Service and Component Suppliers and Stakeholders
- **Enhancing** interaction between ESCOs, Suppliers and Energy Consumers
-



Innovation HUB

- **Inkubation and Fertilization of innovative Business and Finance**
- **Market Development** in Disfunctional Market Settings
- This is done within in third party Finance Research Projects on EU and national level



Lessons Learnt:

Disruptive Changes in the Energy Market provide Exceptional Opportunities for ESCOs- if ESCOs are Willing to Adopt User Demands

Stakeholder- and User-Workshops provide a clear picture: User Demands are Changing, and innovative ESCOs and Start-Ups are on their way to provide adequate and new solutions



The Political Agenda, New User Demands have Sparked Disruptive Changes and Frictions in the ESCO market since 2021- Super Trends



Challenges: Policy & Society

- Climate Protection has become Main Stream
- Decarbonization Target 2045 for Buildings and Industry
- 65% Renewable Energy in the Heating Market
- Energy Security and Independence
- Building Sector: MEPS



....changing User Demands

- Reduction of Coordinative Effort: One-Stop-Shops instead of complex multi tasking of dozens of partners
- Longterm Partnerships instead of Project approaches
- Simple Front End Solutions-moving complex structures into the back end



...require innovative Responses !

- ESCO Scope: handling, coordinating holistic approaches
- Technical scope of energy supply contracting switches from gas based CHP to Heat Pumps and related measures such as building insulation
- Strategic consultancy for decarbonization in buildings and industry with ...
Long term investment schedules and customer relations

”

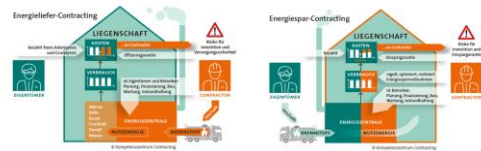
**...ESCO provide tremendous services-
however Business Models need to be
Adopted to the Needs of Users with
regard to their specific Technical and
Organizational Demands**



CEO Hospital



Best Practice: Adoption of ESCO Services to Specific Requirements of Hospitals in the Project CoSo




Target

- Increase Opportunities for ESCOs in the Hospital Sector
- Help Hospitals and Retirement Homes to Cut Energy Cost Bills
- Create Standard Contracts

Key Achievements

- Stakeholder Process with all major German hospital owner associations and hospital groups
- Demand Profiles for Hospitals and Retirement Homes
- Adoption and Match-Making Workshops with ESCOs and Hospitals
- Pilot Projects with technical and business scope adopted to the needs of Hospitals

Beteiligte

Förderer:  Bundesministerium für Wirtschaft und Energie

Mitwirkende & Anwender
(Auswahl):  KEA-BW  bpa

 Diakonie

 HFT Stuttgart
zafh.net

 AWO

Next Steps

- Trainings for Hospital Owners- how to cut costs now
- Set up of new project: One Stop Shop for Hospitals- Information, Finance Diligence, Transformation Roadmap Services and Investment specifically drawn to the demand of hospitals

effinvest.de – First Finance Plattform for SME and ESCOs to provide finance for ESCO Projects

Target

German ESCO's financing demand increases dramatically
The Plattform provides access to financiers, funds etc. to provide competitive financing conditions

Key Achievements:

Plattform performs well

>80 M€ financing volume within 12 months

[Link zum Portal](https://effinvest.de)

*beta-Version



Beteiligte

Förderer:

Mitwirkende (Auswahl):

COMMERZBANK

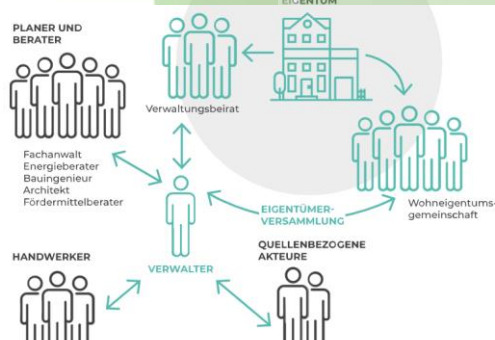
BWBANK Munich RE COMPEON KFW wilo

finstreet. DKB steag NEW ENERGIES GEFISIG DAIKIN

WILLBEE ENERGY European Investment Bank e-on ENGIE GETEC

Next Steps: Hand-Over to professional Venture Builder

Zum Beispiel: GREEN Home – Finanzierungs- und Geschäftsmodelle für die energetische Sanierung von Wohnungseigentümergeinschaften



GREEN Home

Energieeffizienz für
Wohnungseigentümer-
gemeinschaften



Projektziel und Vorgehen

Ein praxisrelevantes Geschäfts- und Finanzierungsmodell entwickeln für einen bisher unerschlossen Investitionsbedarf in die energetische Sanierung von Wohnungseigentümergeinschaften (WEG) von 218,8 Mrd. €, indem alle relevanten Akteure vernetzt werden und die Vielschichtigkeit der Herausforderung damit erkannt und schließlich gelöst werden kann.

Key Achievements

- Experteninterviews und Survey ausgewertet und Kriterienkatalog für bedarfsgerechtes Finanzierungsinstrument abgeleitet
- Stakeholder aktiviert: Langfristige Einbeziehung von Policy Maker, Finanzierern, Verwaltern, Eigentümern, Energiedienstleister gelungen

[Link zur Seite](#)



Beteiligte

Förderer:



Mitwirkende & Anwender (Auswahl):



Nächste Schritte & Mitwirkungsmöglichkeiten für Mitglieder

- Online Dialogformate & agile Workshops zur Erschließung von Potenzialen im Marktsegment
- Weiterentwicklung und Standardisierung iSP für WEG mit politischen Stakeholdern
- Capacity Building Aktivitäten für Verwaltende mit Input von Expert:innen aus dem Projektbeirat

DENEFF EDL_HUB innovation Hub is Tackling also Other Disfunctional Market Sectors of High Relevance for ESCOs



Home Owner Associations

20% of Housing in Germany is organized in HOAs
Refurbishment Rate < 1%

Issue

Low Refurbishment Activities
Complex Approach for ESCOs and Financiers to conduct Deep Energy Retrofits

Approach

- EU Project GREEN home
- Creating One Stop Shops with ESCOs, Financiers, Consultancies
- Learning from LaBeef



SME Financing of Energy Investments:

Finance Industry does not provide financing approaches for Energy Efficiency Investments

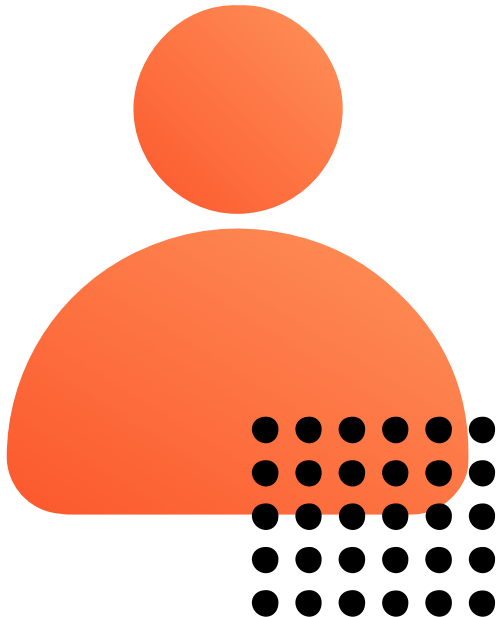
- Lack of Finance Products and Energy Service Approaches for SME Decarbonization
- Finance: mismatch of costs for due diligence and project size

- Effinvest.de- DENEFF has set up the first finance platform for financing energy investments in SME
- Launch in Berlin October 13



More to Come

Contact



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E-Mail: ruediger.lohse@edlhub.org

