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UNIDO Workshop
Vienna May 4^h 2018

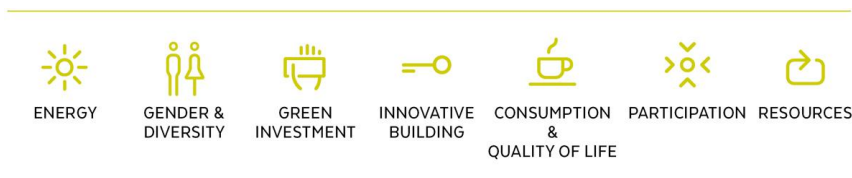


Grant Agreement number: 696008 — SEFIPA — H2020-EE-2014-2015/H2020-EE-2015-3-MarketUptake

The project leading to this application has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 696008.

■ Austrian Society for Environment and Technology (ÖGUT) – www.oegut.at

- ◆ Non-profit organization – platform for sustainable development (since 33 years)
- ◆ 100 organizations and institutions (business, administration, environmental advocacy).
- ◆ Topics:

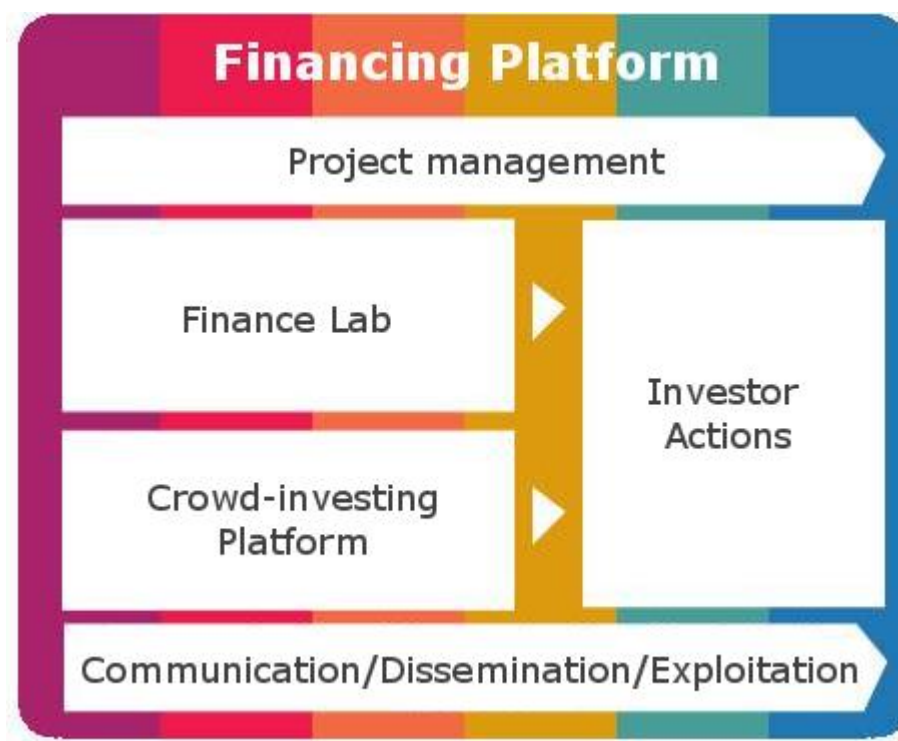


■ Energy Changes Projektentwicklungs GmbH – www.energy-changes.com

- ◆ Finance/Engineering/Technical/Policy/Strategic Advice
- ◆ References in over 30 countries!
- ◆ Topics: renewable energy, energy efficiency and GHG mitigation activities



■ SEFIPA – Work plan



■ Crowd4Energy

- ◆ Platform for the financial contribution to SE projects in Austria
- ◆ Subordinated loans
- ◆ Projects: focus on SMEs
- ◆ Project pipeline (Leads): E-mobility, PV-roof tops, small scale energy efficiency
- ◆ Investment volume per project: 50.000 to 200.000 EUR
- ◆ Approved for the Austrian and German Financial market
- ◆ Investments from 250 EUR



ABGESCHLOSSENE PROJEKTE





PV Berglandmilch

CC PV 1 GmbH & Co KG

 Volumen: max. 150.000 Euro
min. 50.000 Euro

 Laufzeit: 5 J

 Zins: 4,00 %

 Tilgung: Endfällig

Bereits finanziert: 150.000 €


300%


Weitere Informationen >





Kleinwasserkraft am Wiener Neustädter Kanal

Unser Kraftwerk UK-Naturstrom GmbH

 Volumen: max. 300.000 Euro
min. 50.000 Euro

 Laufzeit: 5 J

 Zins: 4,50 %

 Tilgung: Annuitätisch

Bereits finanziert: 300.000 €

600%

Weitere Informationen >

	Finance Labs	Financing/legal instruments
1	SE financial products for institutional investors	<ul style="list-style-type: none"> Guidelines for Energy Efficiency in Real Estate Funds Supporting interest parties to develop green bonds
2	Increase attractiveness of EPC	<ul style="list-style-type: none"> Quality guidelines and marketing for EPC facilitators Accounting Rules for EPC (Maastricht, EU STAT Guidance)
3	Incentives for investments in energy efficiency in buildings	<ul style="list-style-type: none"> Monitoring of actual energy consumption Tax incentives Specific topics in tenancy law/ condominium law
4	Increase investments in roof top PV in „multi parties“ buildings	<ul style="list-style-type: none"> Business/ financing models
5	Optimizing energy related subsidy system	<ul style="list-style-type: none"> Combining investment grants with guarantees Opening subsidies for ESCOs

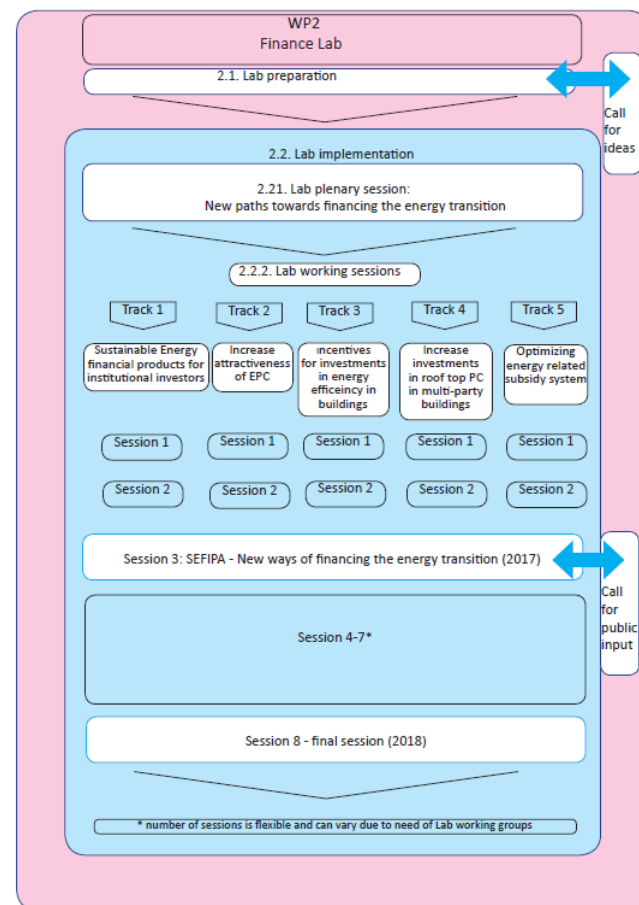


■ Finance Labs – Process

- ◆ Stakeholders: public administration, financial sector, business and consumer associations, energy service providers, NGOs)
- ◆ Small working groups, public input, plenary sessions

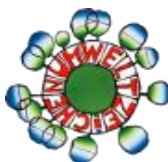
■ Experience

- ◆ Keeping interest of participants high, face-to-face meetings are important!
- ◆ Adapting process to changing legal environment
- ◆ Separation of legal instruments vs. finance instruments not always practical - Finance Labs are topic-based (5 Labs instead of 2 tracks)
- ◆ Country specific
- ◆ Flexible for new ideas



■ Energy Efficiency in Real Estate Funds

- ♦ **In 2016 additional 1.1 billion were invested** in 6 open real estate funds raising the total volume of these funds to EUR 6.7 billion (end of 2016).
- ♦ SEFIPA advises real estate funds applying sustainability criteria for their buildings
- ♦ Results:
 - **Fund volume EUR 823 Mio** will introduce some sustainability criteria in 2018.
 - **Fund volume EUR 132 Mio** will introduce the “Austrian Eco-Label for real estate funds” in 2018

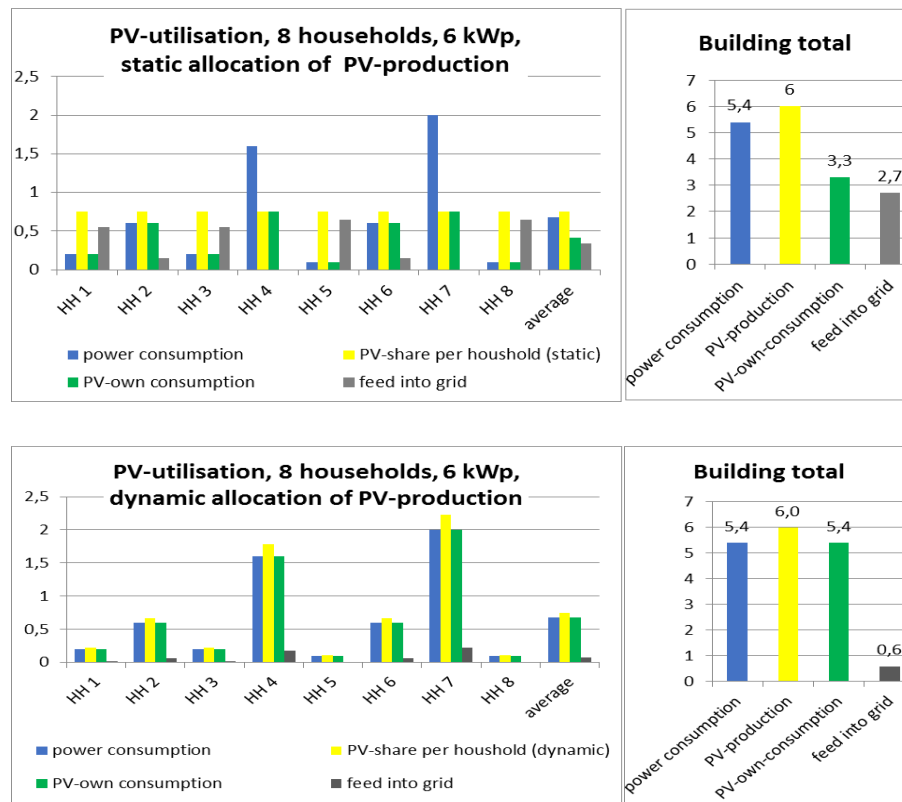


- ♦ Specific target: develop **further guidelines** how to make buildings in real estate funds **more energy efficient**.



■ Financing PV at multi family houses by own consumption

- ◆ Suggestions for amendment of the Austrian Electricity law, by SEFIPA (June 2017)
- ◆ National wide information platform and advisory service for pilot projects together with Austrian PV-association
- ◆ 5 business models developed



Business models for PV-own consumption at multi family buildings

model 1 „PV plant as infrastructure“ („free power for residents“)	model 2 „Residents organize PV-plant“	modell3: company leases PV-plant to residents	model 4 „PV-supply-contracting“	model 5 „full supply by energy supplier“
Landlord invests in PV and provides PV power free to the residents (compared to joint laundry room or bicycle storage)	Residents invest and operate PV-plant. Distribution of PV-power and costs by internal agreements. Legal form: E.g. founding of association	Company invests and operates PV-plant and leases a PV-contingent (allocation) to each household	Contractor invests in PV-plant and sells PV-power to households by Cent/kWh own consumption	Energy supplier invests and operates PV and supplies residents with mix of PV-power and power of the net (all in one supplier)



■ Financing PV at service and industrial buildings by PV-Contracting

- ◆ In Austria PV-Contracting not applied, due high risk of fall away of the PV-consumer (e.g. insolvency, conversion of production)

Solution: Option to switch from own consumption modus to feed in tariff.

Working group elaborates suggestion for the next Eco Electricity Act (supposed autumn 2018)



© Dreamstime



■ Facilitators for Energy Performance contracting (EPC)

- ◆ Background: Clients (small municipalities or SMEs) often overstrained by complexity of EPC
- ◆ Solution: independent facilitators support clients at tender process
- ◆ Development of
 - quality criteria for facilitators
 - modular structure of service packages for clients
 - list of quality proved facilitators

published by regional energy agencies, Austrian association for energy service company (DECA)

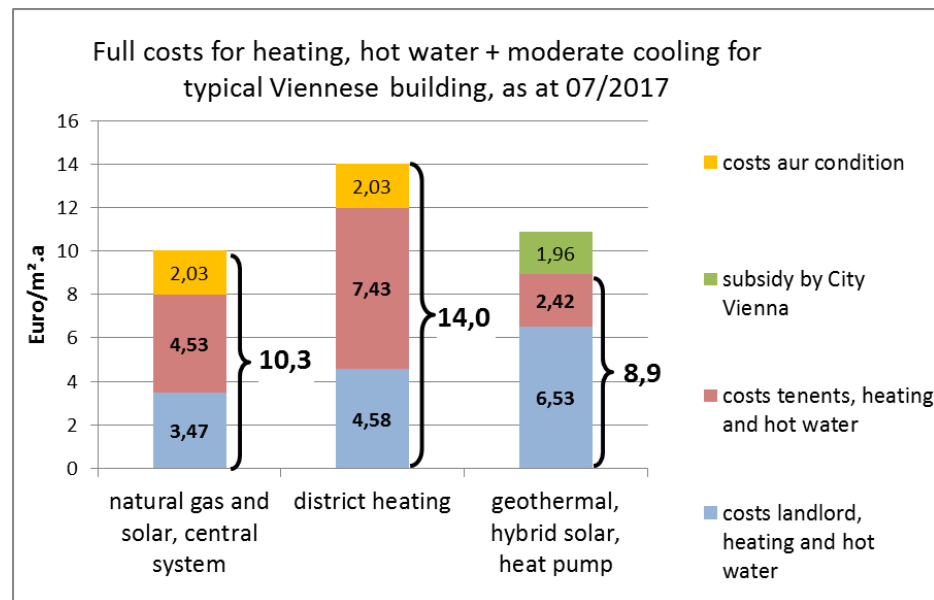
■ Maastricht neutrality of Energy Performance contracting (EPC)

- ◆ Background: In Eurostat guidance note 7th August 2015 EPC was defined as depth increasing according Maastricht criteria
- ◆ Solution: Changes of Eurostat guidance note
- ◆ Meeting and discussion with Statistik Austria and responsible Austrian ministries with the request to argue for Maastricht neutrality of EPC at Eurostat
- ◆ End of 2017: change of Eurostat guidance note, EPC under certain framework Maastricht neutral
- ◆ Working group in AT: screening existing EPC model contracts and suggestion for amendments



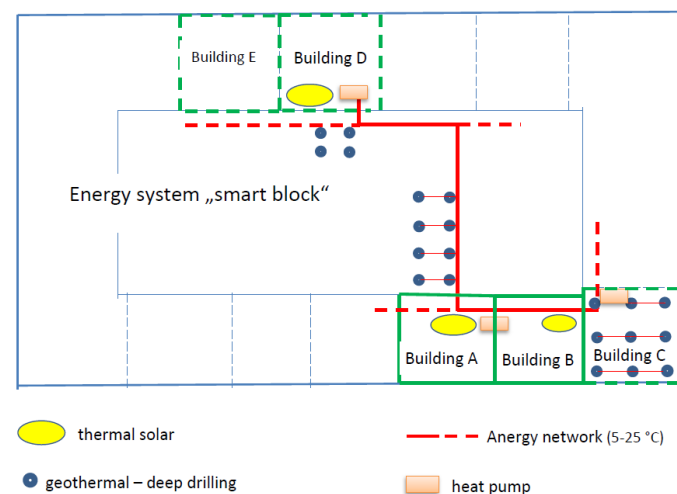
■ Heat supply contracting - solution for the split incentive of tenant / landlord

- ◆ Technical solution of seasonal heat storage by deep drillings, solar and heat pumps, SPF >6
- ◆ Organisational solution by joint energy system for a block of building: economy of scale and gaining synergies (potentials solar, storage mass, peak load planing)
- ◆ Economic solution: Investment and operating by Supply contractor. High investment costs shared between landlord and tenant

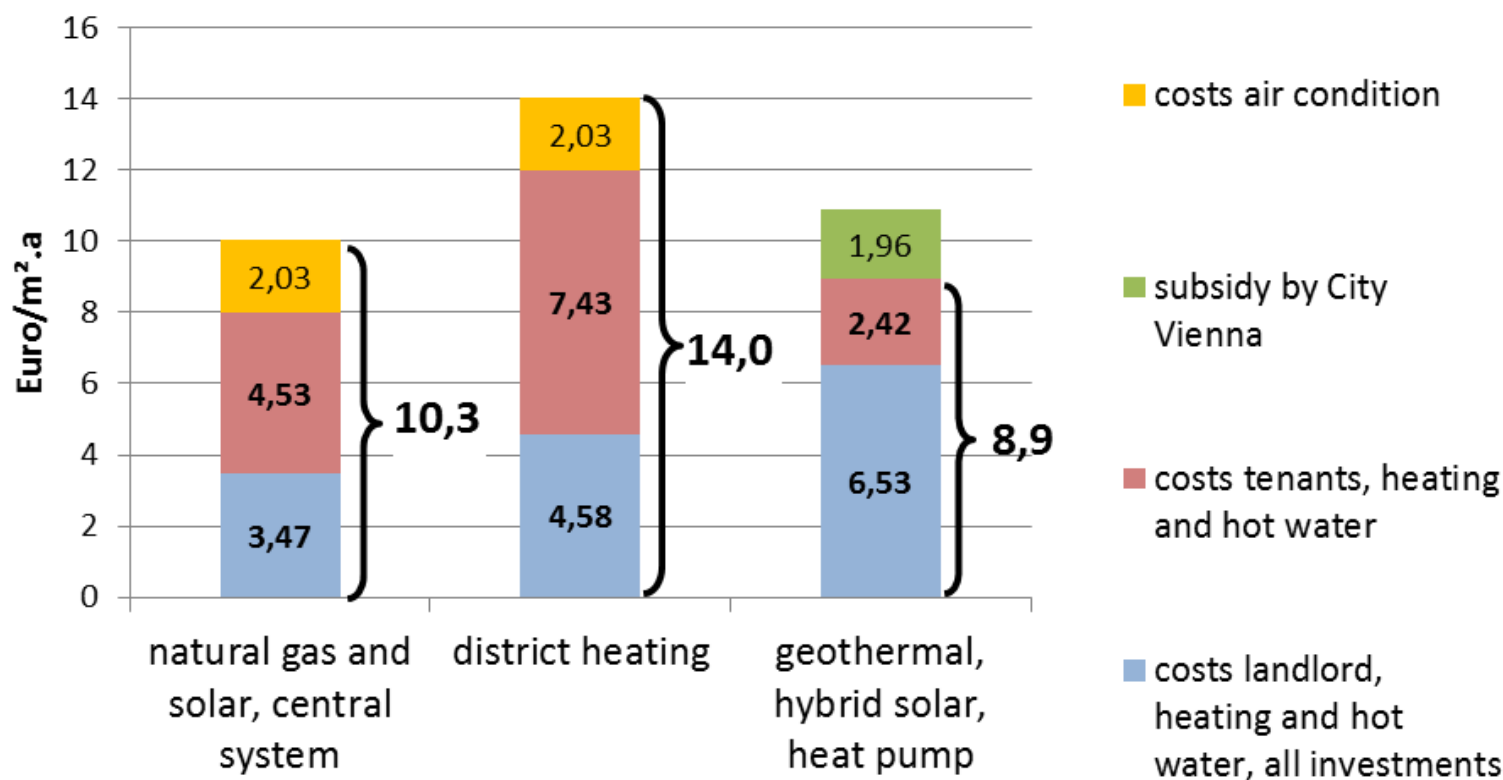


■ Heat supply contracting – pilot project

- ◆ Block of 18 buildings, tenement houses
- ◆ High investments for geothermal, solar and heat pump, low energy costs.
- ◆ Phase I: 2 buildings, 20 apartments
start of construction: spring 2018
Phase II: 4 additional buildings
(planned 2019 and 2020)
- ◆ Full cost: lower than district heating system
- ◆ 85% Energy savings (20 vs. 157 MWh/a)



Full costs for heating, hot water + moderate cooling for typical Viennese building, as at 07/2017

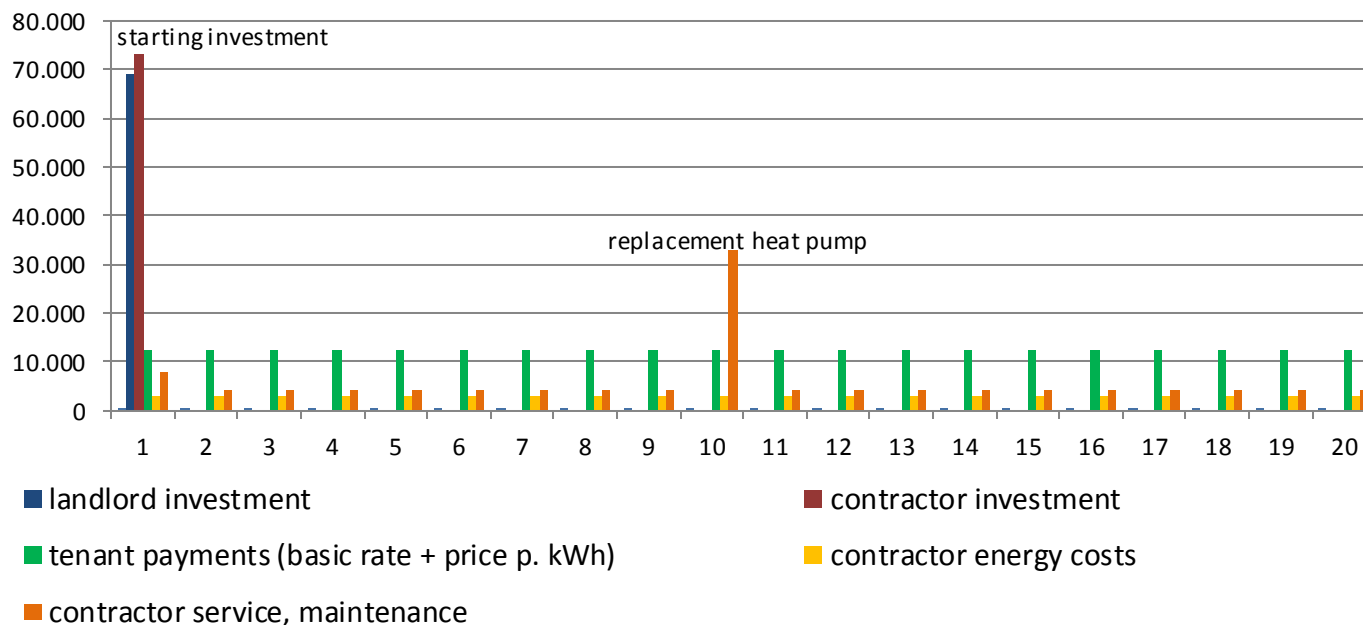


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■ Heat supply contracting – full costs comparison by 20 years – investment sharing

cost distribution during contracting period of 20 years



■ Heat supply contracting – success factors

- ◆ comparison of full costs of heating systems (e.g. 20 years period)
- ◆ energy-net across buildings and estates (5-25 °C), block of houses
- ◆ Fair share of investment costs between tenant and landlord
- ◆ Stable conditions, planning security for contractor



- **Combining Investment Grants (Ministry of Environment) with Guarantees (Ministry of Economy)**
 - ◆ hotel sector in AT: high investments needed in energy efficiency
 - ◆ Existing environmental subsidy provided through MoE,
 - ◆ but: banks / suppliers are reluctant to finance projects if the credit rating of the hotel (where the EE equipment shall be installed) is low. – tourism sector!
 - ◆ due discussion and arguments of SEFIPA working group a combination of
 - federal environmental investment grant (provided through MoE) and
 - guarantee provided by Austrian promotional bank for the tourism (OEHT) became feasible.



■ Combining Investment Grants (Ministry of Environment) with Guarantees (Ministry of Economy)

Certain energy efficiency investments in hotels could be financially attractive due to the environmental subsidy provided through MoE, however banks and/or suppliers (of energy efficiency equipment) are reluctant to finance the hotel to purchase the equipment if the credit rating of the hotel (where the EE equipment shall be installed) is low. Until now project sponsors have not been permitted to combine a federal environmental investment grant (provided through MoE) with a guarantee provided by Austrian promotional bank for the tourism industry (OEHT)

Examples for applying this approach could be (taking into account either environmental investments only or mixed environmental and non-environmental investments):

Environmental only:

- ◆ Both (MoE und OEHT) subsidies within de-minimis regulations
- ◆ OEHT within de-minimis and MoE under environmental subsidy law and both under European General Block Exemption Regulations
- ◆ OEHT and MoE each its specific limits and jointly the higher of both limits of General Block Exemption Regulations

Mixed Project

- ◆ Combining KPC with OEHT dedicated credit line and guarantee if both jointly are within General Block Exemption Regulations limits



■ Tax Incentives – Renovation of Residential Building Stock

- ◆ (2016-2017) Submission of a number of fact sheets to relevant Austrian stakeholders promoting (re-) implementation of tax incentives to incentivize renovation of existing residential buildings (1.5% p.a. to 3% p.a.); the latest Austrian Government Programme (2017) has included this recommendation

■ Monitoring of Energy Consumption in Buildings

- ◆ Submission to the Austrian Energy Agency as Methodology to receive white certificates for implementing monitoring of energy consumption in buildings

■ Engaging Public Authorities to Issue Green Bonds

- ◆ Lobbying public stakeholders to engage in green bonds. Now part of the Austrian climate and energy strategy



■ Contact

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