››› Energy Efficiency Financing
What can be learnt from Germany?

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Bank aus Verantwortung

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››› Our Background

KfW is…

- One of the biggest financier of EE/RE worldwide
- financing in various sectors (households, public sector, industry, SME, …)
- financing programmes in most continents under different conditions
- applying various financing models (loans, grants, TA, equity, guarantees,…)

Which experiences are relevant for India to promote EE by funding programmes?

››› Why financing matters

1. Financing is a mean to overcome existing barriers

2. There are many financial barriers:
   - › Lack of finance for EE measures (bankable projects, collaterals, …)
   - › High initial and transaction cost for innovations
   - › High risks for forerunners
   - › Split incentives

3. Financing is also a tool to overcome non-financial barriers
   - › Awareness building
   - › Capacity development

››› Financing tools

Equity

Grants
e.g. rated appliances

ESCO-related financing
e.g. shared saving contracts

Loan
(bank-based)
e.g. home retrofit programme, mortgage loans

Guarantees
risk pooling for ESCOs

Tax credits
e.g. building retrofit in Italy

Utility-based financing
pay-as-you-save schemes

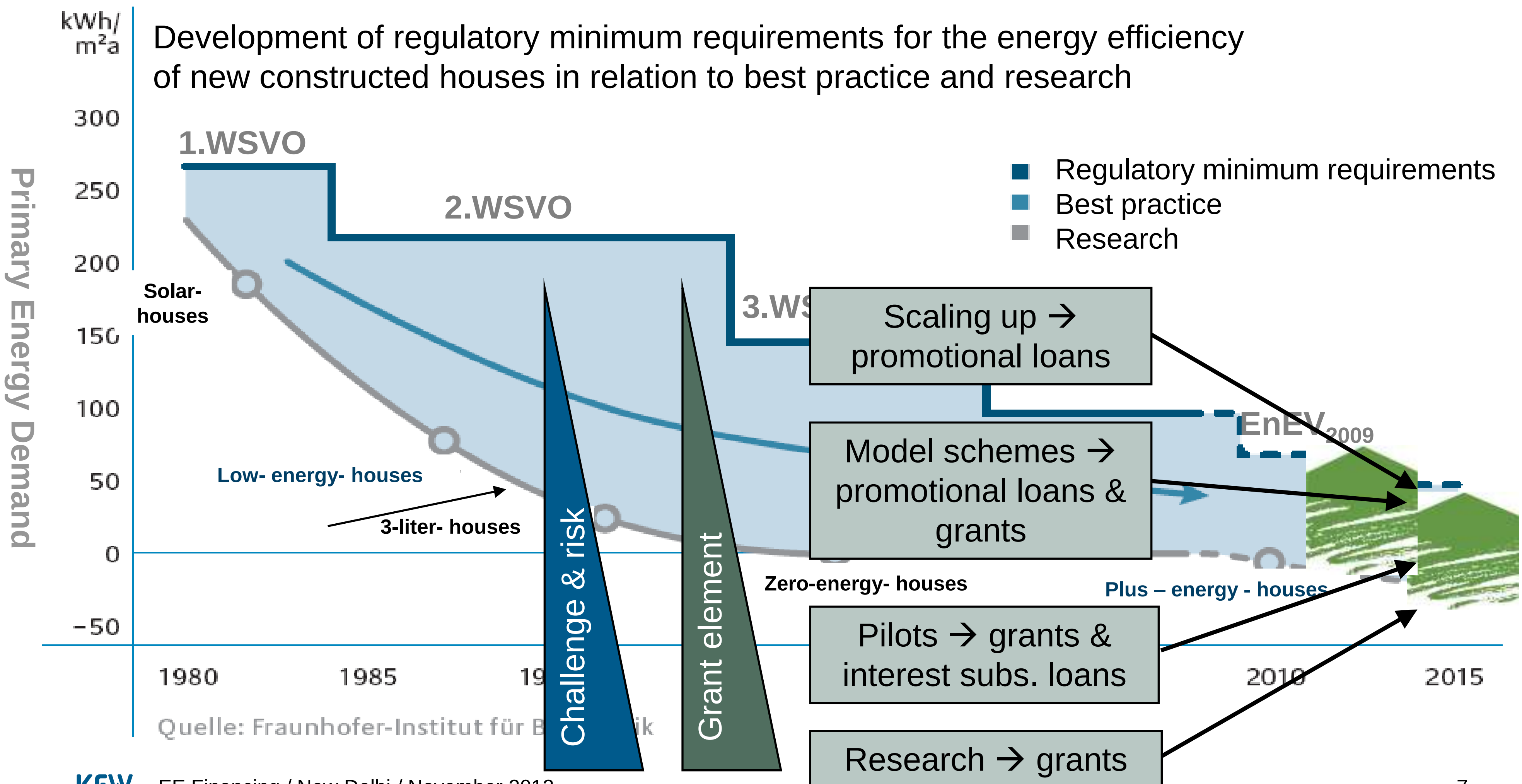
››› Lessons learnt

1. Financing must correspond to the subject

Lifetime	Payback period	Risk
› Short lifetime → Grants e.g. as discounts → Consumer credits › Long lifetime → long-term loan → debt relief	› Loan maturity equals payback period › Revolving funds for short- to medium-term payback periods › …	› High risk → grants → guarantees › Low risk → bank managed loans

››› Lessons learnt

2. Financing must correspond to the status on the learning curve



››› Lessons learnt

3. Financing must reflect the country framework

- Legal framework
- Access to finance from banks etc.
- Preparedness to invest in EE
- Openness to innovations
- Availability and financing capacity of ESCOs
- Status of EE financing …

- Examples:

Procurement procedures are a barrier for ESCOs → establishment of a Super-ESCO	Private banks are not prepared to finance EE measures → establishment of an EE-Bank	Developers have no collateral to finance EE measures → establishment of a guarantee fund

Lessons learnt

4. Financing can be budget neutral

Tax effects

- EE promotional programmes mobilise private capital and can stimulate the economy and provide additional tax revenues (VAT, on profit, labour, corporations,..)

  [It is estimated that the German Building Retrofit Programme returns for each EUR subsidy four EUR]

Labour effects

- Many EE measures are very labour intensive
- Local capacities in manufacturing can be built along the promotion of EE

- Leveraging effect of blending public and private funds should increase over time
- This requires a periodic adjustment of promotional criteria, capacity development, awareness raising measures to avoid windfall gains and lock-in effects

››› Lessons learnt

5. Financing must be supported by accompanying measures

Awareness raising

- Creation of demand
- Proper operation of investments
- Awareness for environment and climate issues

Capacity development

- Energy auditors, engineers, architects
- Suppliers and manufacturers
- Craftsmen

M + V

- Monitoring of energy savings
- Assessing programme impact
- Self-learning

Research

- Preparation of future oriented promotional levels to raise further potential

››› Conclusion

1. Financing can help to promote EE by addressing financial and non-financial barriers
2. Financing instruments must correspond to the framework conditions of the country and reflect the level of progress in promoting EE
3. Financing instruments must be well designed to overcome market failure
4. Subsidies can be budget neutral
5. Financing has substantial job creation effects
6. To make financing effective, supporting Technical Assistance might be required
7. There is not one funding mechanism → a combination of financing tools might be an appropriate solution

There is not THE solution. A funding programme must be context specifically developed and updated! Various funding tools can be used by the same agency, if double funding is excluded!

››› Thank you for your attention

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