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Energy Efficiency Finance in the US and China

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Three Approaches to EE Project Finance

1. Utility pays all or most of cost

- Cheaper than new generation

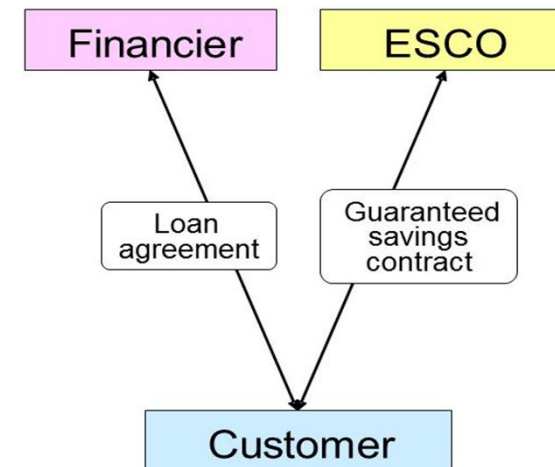
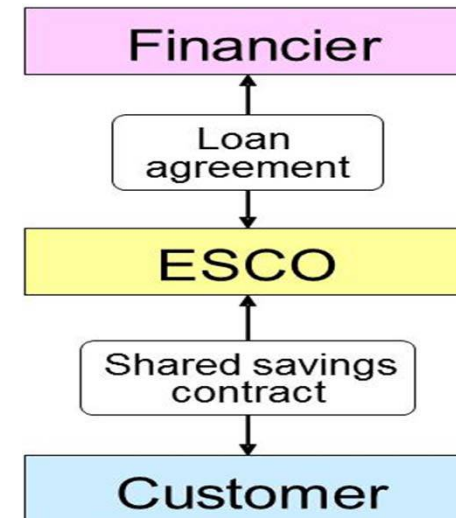
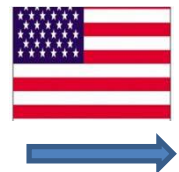
2. ESCO provides financing

- Used at the beginning of the US ESCO industry
- Relatively expensive financing because the ESCO is the credit
- Financing remains on ESCO's balance sheet



3. Third party provides financing

- Relatively inexpensive
- 100% debt -- no equity involved
- ESCO takes performance risk & Lender takes credit risk
- Available to those with good credit



Comparison of US and China EE finance



1. Long history of EE financing
2. Focus on **government** buildings
3. Technology **R&D**, and deployment
4. **Third party** direct financing^{e1}
5. ESCOs are **large**
6. **Guaranteed** energy savings
7. **Private** banks
8. Long term financing
9. **On-going** savings verification
10. **Integrated** efficiency measures
11. EE, RE and generation **integrated**
12. **Standard** contracts



1. **Short history** of EE financing
2. Focus on **industry**
3. Technology deployment
4. **ESCOs** financing
5. ESCOs are **small**
6. **Shared** energy savings
7. **Government-owned** banks
8. Short term financing
9. **One time** verification
10. **Single** efficiency measure
11. Single project in **one area**
12. **No** standard contracts

Slide 3

e1

points 4 and 6 are discussed in the next slide so maybe aren't needed here.

eusher; 02/10/2013

Public funds finance the private sector in energy efficiency

Case study of GEF/IFC CHUEE

- 2006, \$16.9 Mn GEF grant, \$200 Mn IFC loan for EE marketing, development and financing services
- 2012, leveraged \$800 Mn local bank loans for 170 plus EE/RE projects
- Now, mitigates over 19 million tCO₂/Yr, = total annual emissions of Mongolia

