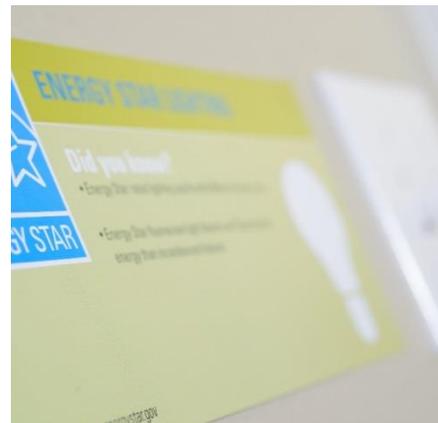


Financing EE: Invest Today, Save Tomorrow

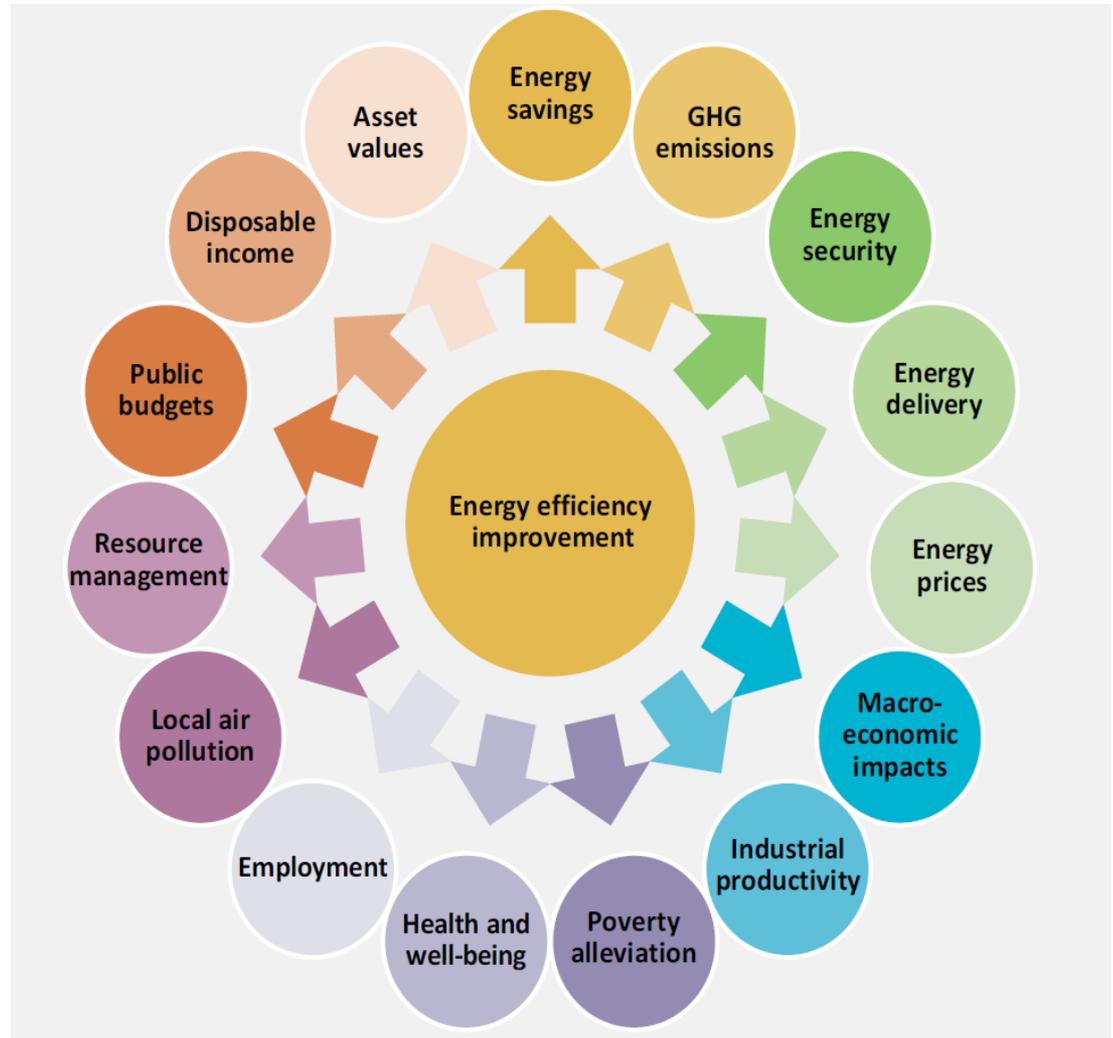
Tim Leach
EE NOW
January 12, 2016



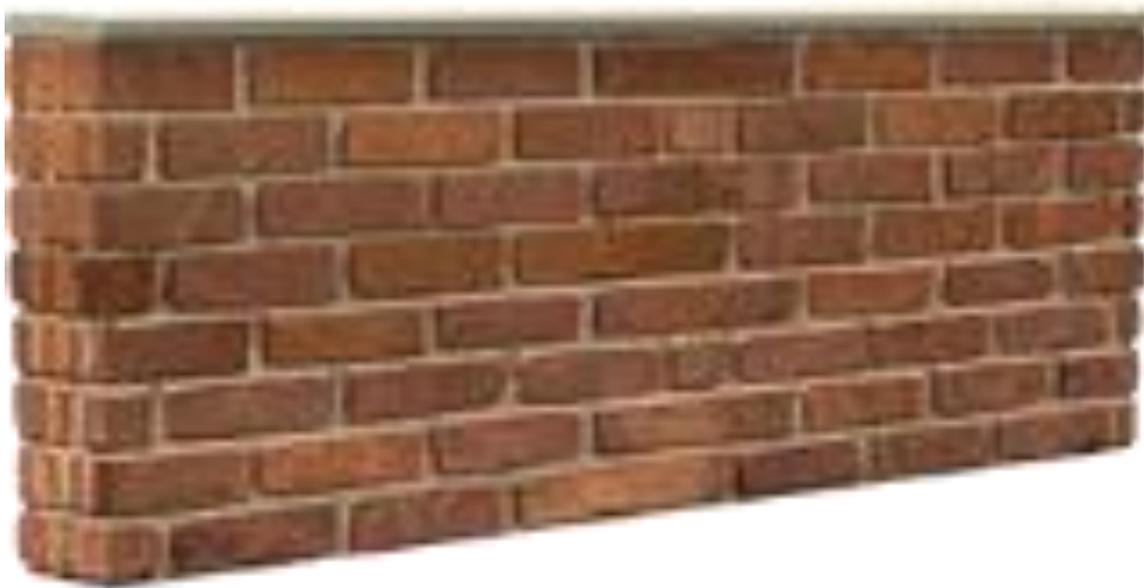


**Energy
efficiency is a
smart
investment**

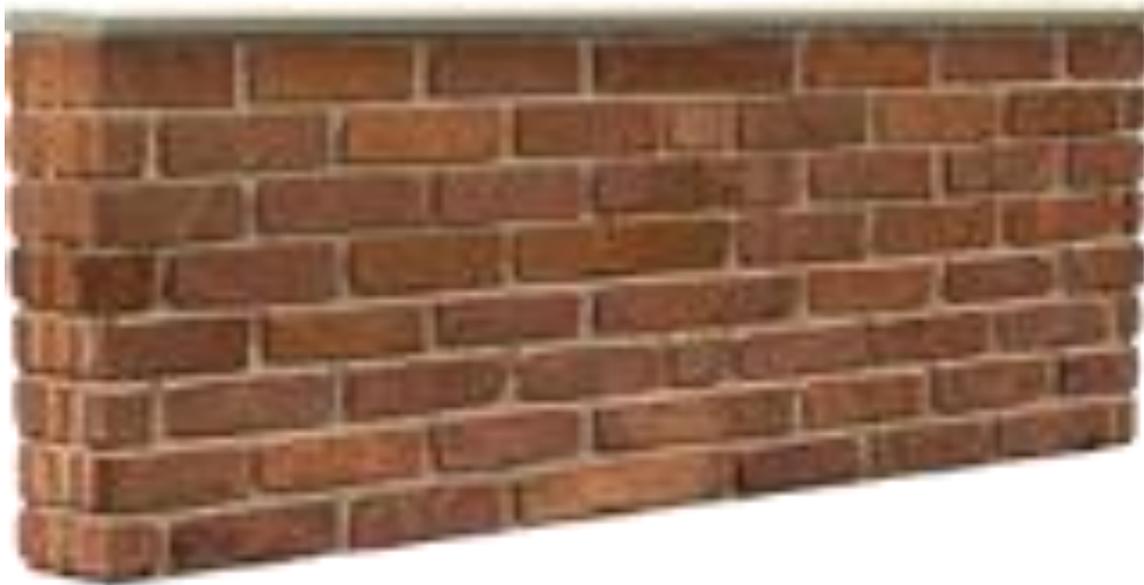
Multiple benefits of energy efficiency



If it makes so much sense...?



If it makes so much sense...?



Types of capital



- **Cash**
- **Grant**
- **Financing**

Sources of Capital

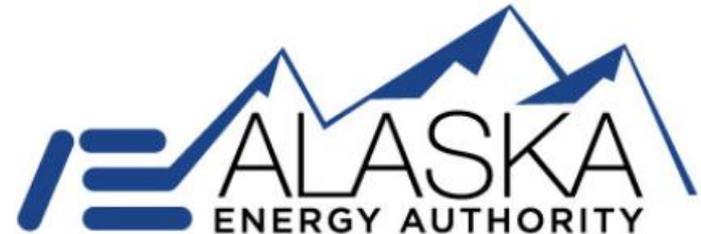
□ Alaska Energy Authority

- Village Energy Efficiency Program (VEEP)

Community buildings
and infrastructure

Population under
8,000

Competitive award,
grant



Sources of Capital

- Alaska Housing Finance Corporation
 - Alaska Energy Efficiency Revolving Loan Program (AEERLP)

State, Municipal,
Schools and the
University of Alaska

No minimum /maximum

Unsecured loan



Sources of Capital

❑ Rural Community Assistance Program (RCAC)

Non & for-profits, public and tribal governments

Housing, community facilities, small business

Short-term loans for project development available



RCAC

Sources of Capital

❑ Community Commerce and Economic Development

- Alternative Energy Conservation Loan Fund

Alternative energy or EE

Alaska residency requirement

Max of \$50,000



Sources of Capital

❑ Commercial Lenders

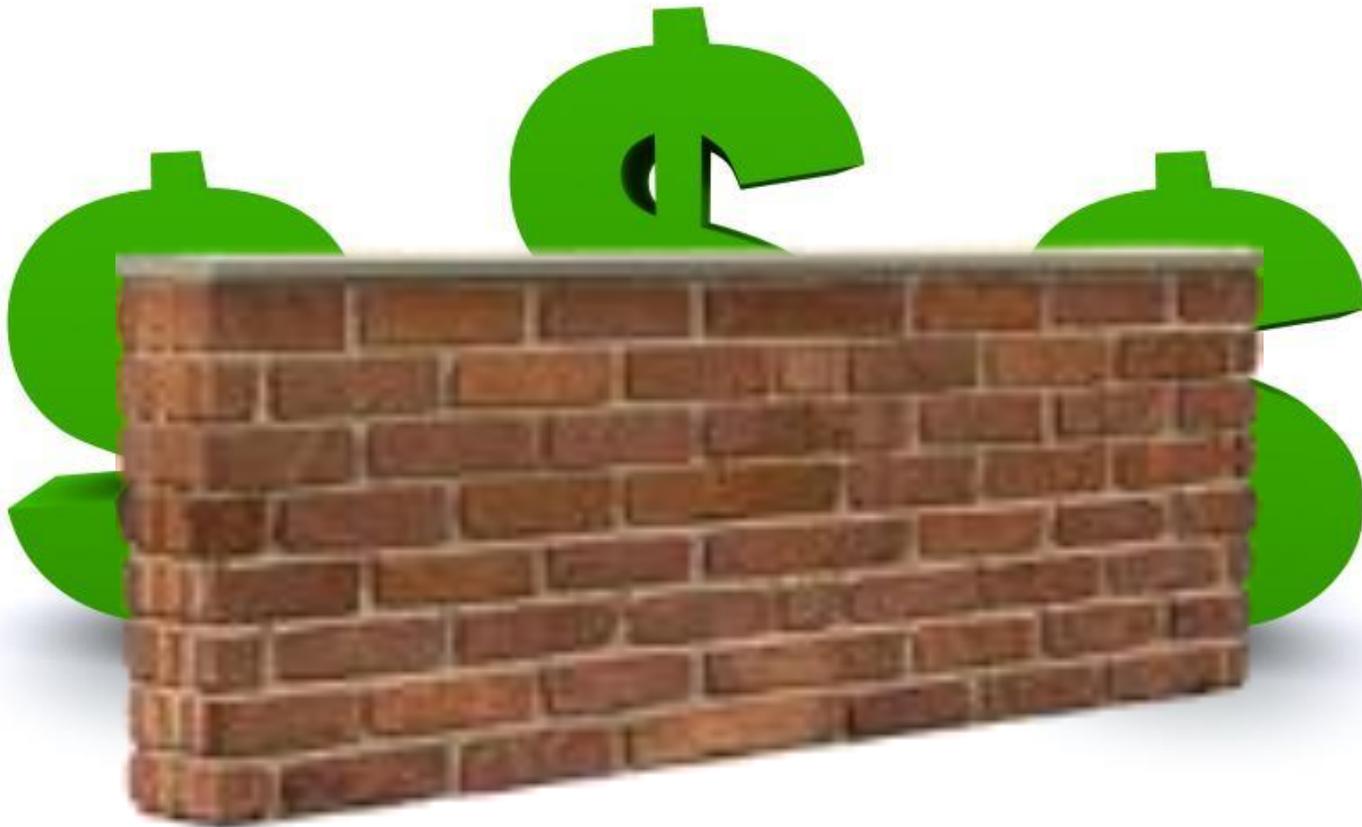
Lender originated to lender standards

Financing in the form of loans and lease purchases

May be more restrictive than state programs



If it makes so much sense...?

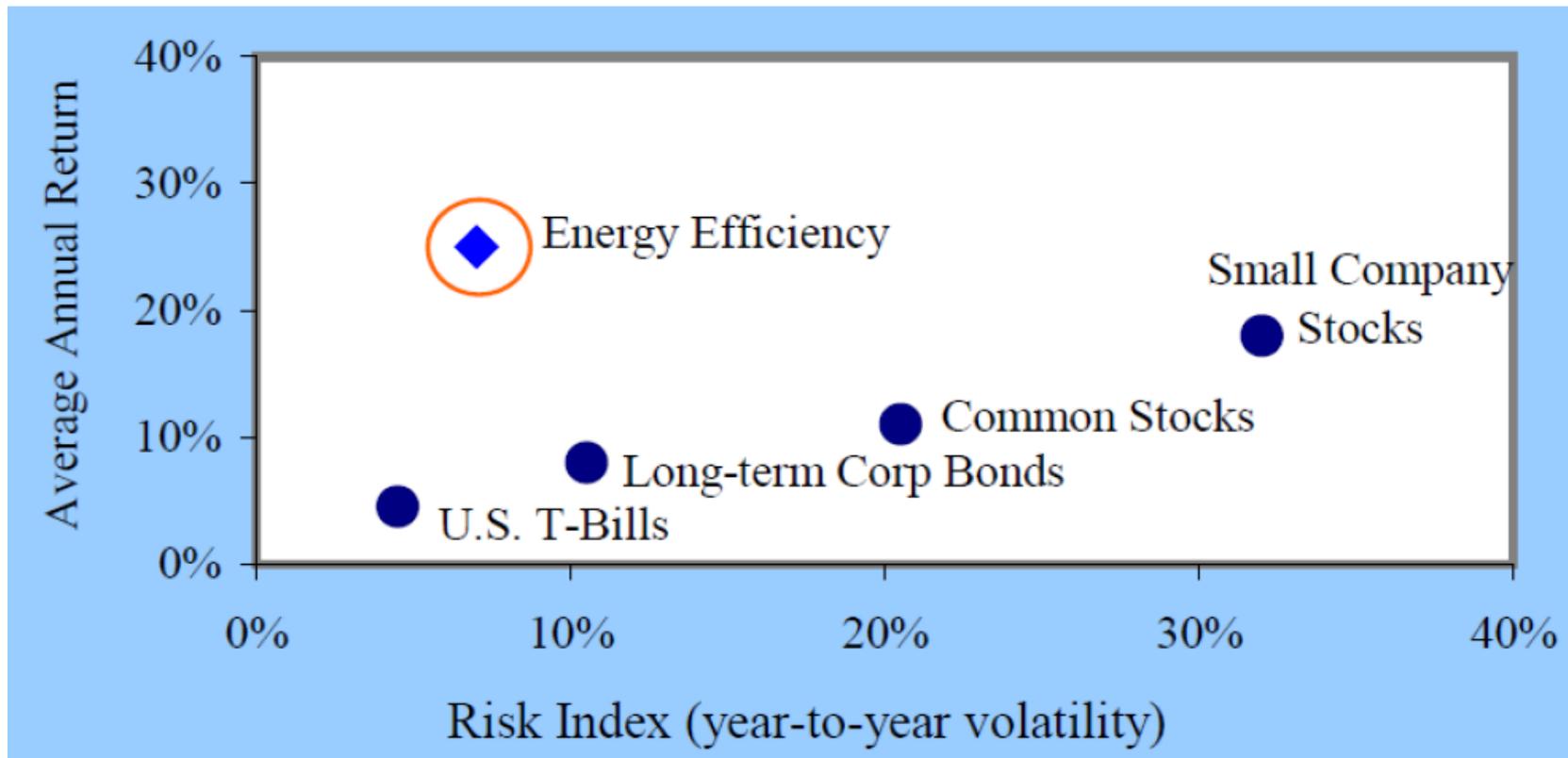


Barriers beyond money



Knowledge and
motivation to pursue
energy project
financing

Efficiency investment risk and return



Cost of delay – case study



Cost of delay – case study

Cash Flow Calculator

INPUTS & OUTPUTS					
Pre-Retrofit Annual Energy Expenditure	\$460,000	Cost for Improvements	\$ 563,000	Loan Term (yrs.)	6
Post-Retrofit Annual Energy Expenditure	\$317,000	Design/Engineering	\$ 84,450	Interest Rate	2.500%
Post Retrofit Annual Energy Cost Savings	\$143,000	Project Management	\$ 16,890	Number of Payments per year	12
Post Retrofit Annual Energy Savings %	31%	Contingency	\$ 56,300	Down Payment	\$ -
Energy Cost Annual Escalation Rate	2.0%	Project Costs - Down Payment	\$ 720,640	Discount Rate	8.0%
Assumed Project Life	15				

Cost of delay – case study

CASH FLOW COMPARISON, COST OF DELAY

	Cumulative Cash Flow End of year 15	Difference, compared with Appropriation Awarded yr 5	Difference, compared with Loan, Immediate Action	Difference, compared with Loan, 5 yr Delay	Difference, Compared with No Action
Appropriation Awarded Year 5	\$ (6,853,215)	\$ -	\$ (18,195)	\$ 740,866	\$ 1,720,856
Loan, Immediate Action	\$ (6,835,020)	\$ 18,195	\$ -	\$ 759,061	\$ 1,739,051
Loan, 5 Year Delay	\$ (7,594,081)	\$ (740,866)	\$ (759,061)	\$ -	\$ 979,990
No Action	\$ (8,574,071)	\$ (1,720,856)	\$ (1,739,051)	\$ (979,990)	\$ -

Thank You

For more information visit:

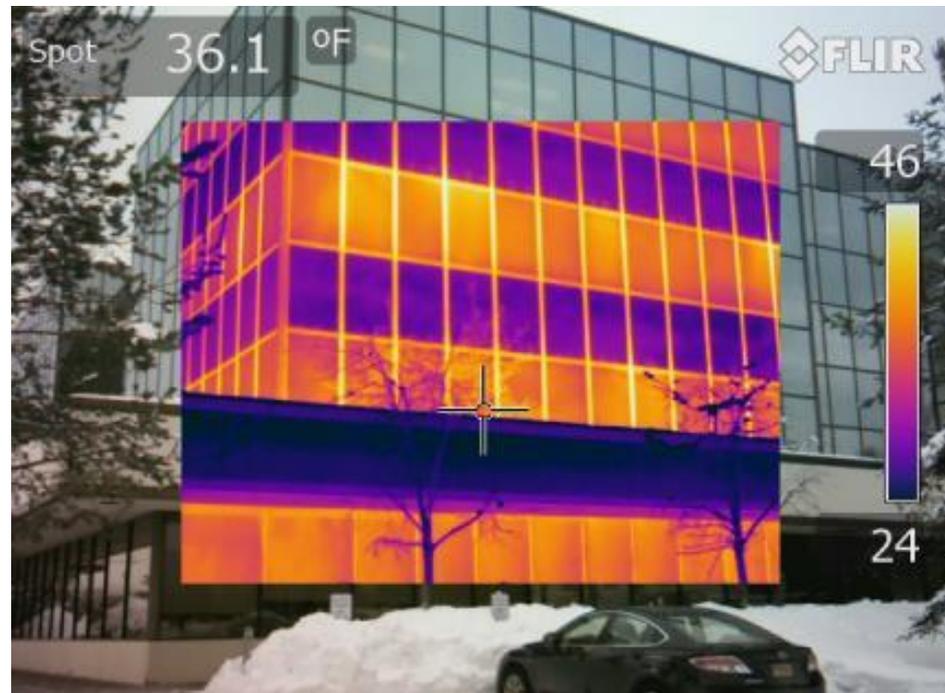
<http://www.ahfc.us/efficiency/energy-programs/>

Or Contact:

Tim Leach

tleach@ahfc.us

907-330-8198

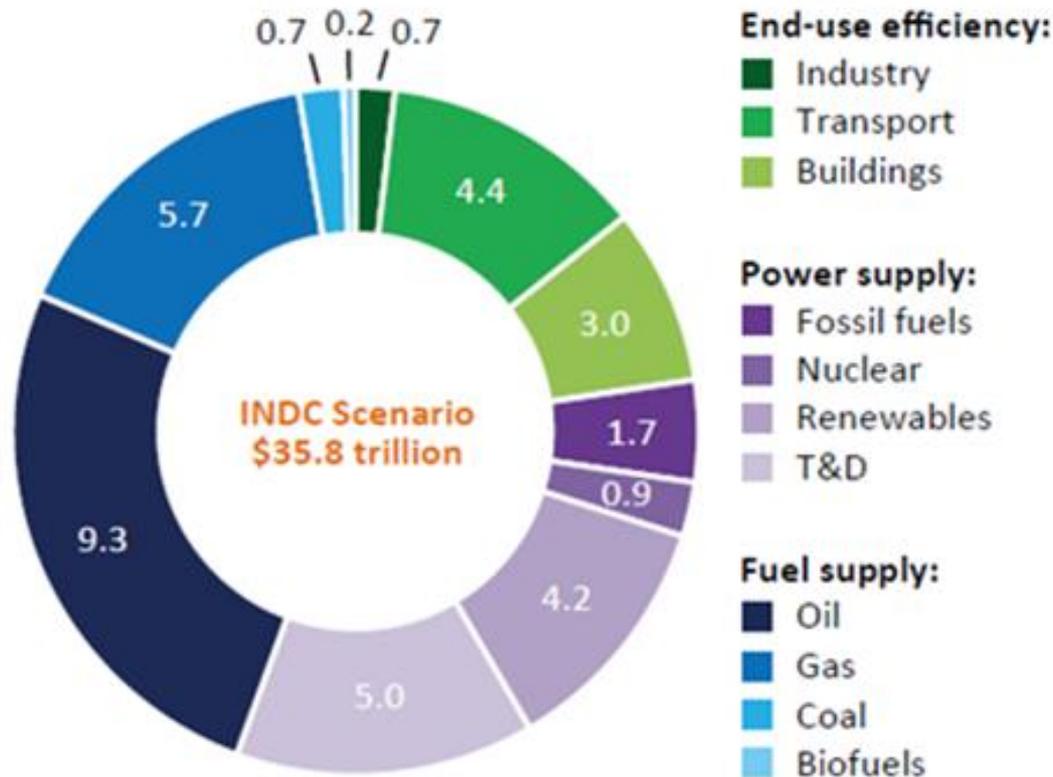


AHFC's AEERLP Rates



01/04/16	
Year	Rate
1	1.875
2	2.000
3	2.125
4	2.125
5	2.375
6	2.500
7	2.625
8	2.875
9	3.000
10	3.125
11	3.250
12	3.375
13	3.500
14	3.500
15	3.625
16	3.625
17	3.750
18	3.750
19	3.875
20	3.875

Cumulative global investments 2015-2030



Note: T&D is transmission and distribution, investments are in trillion dollars, 2013