



The State of Commercial Efficiency Finance

Perspectives from the Better
Buildings Challenge

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Four key trends in the commercial market

1

Market size and distribution by product type

2

“It’s the demand, stupid”

3

Finance hanging in the balance (sheet)

4

Proliferation of financial products



Better Buildings[®]
CHALLENGE
U.S. DEPARTMENT OF ENERGY

Who are the Financial Allies?

- 29 leading financing companies
- 23 general, 6 multifamily
- Primarily project originators
- Some institutional secondary market investors (e.g. Citi) and specialty providers (e.g. Energi)
- Active in all sectors including C&I, MUSH, multifamily, and residential across the U.S.
- Represent large, medium, and start-up companies

Goals of the Financial Allies program

Recognize the Allies
for their success

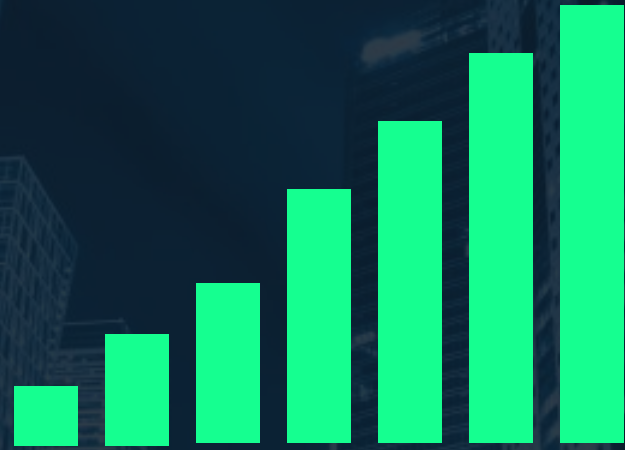
Educate the market
about financial
products available

Connect building
owners and vendors
with financing providers

Unlock the market with
implementation models
and best practices

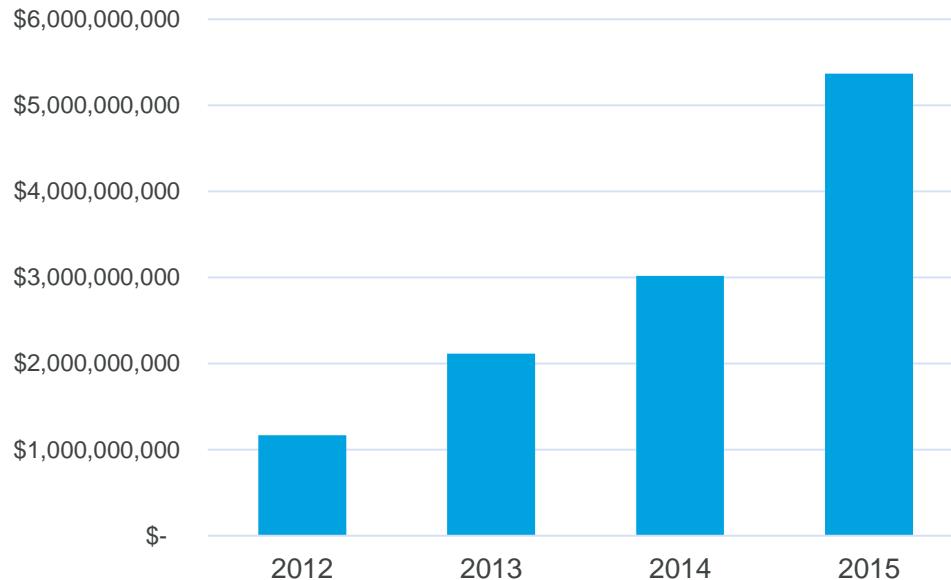
Allies speaking at the Finance Forum





Market size and distribution by product type

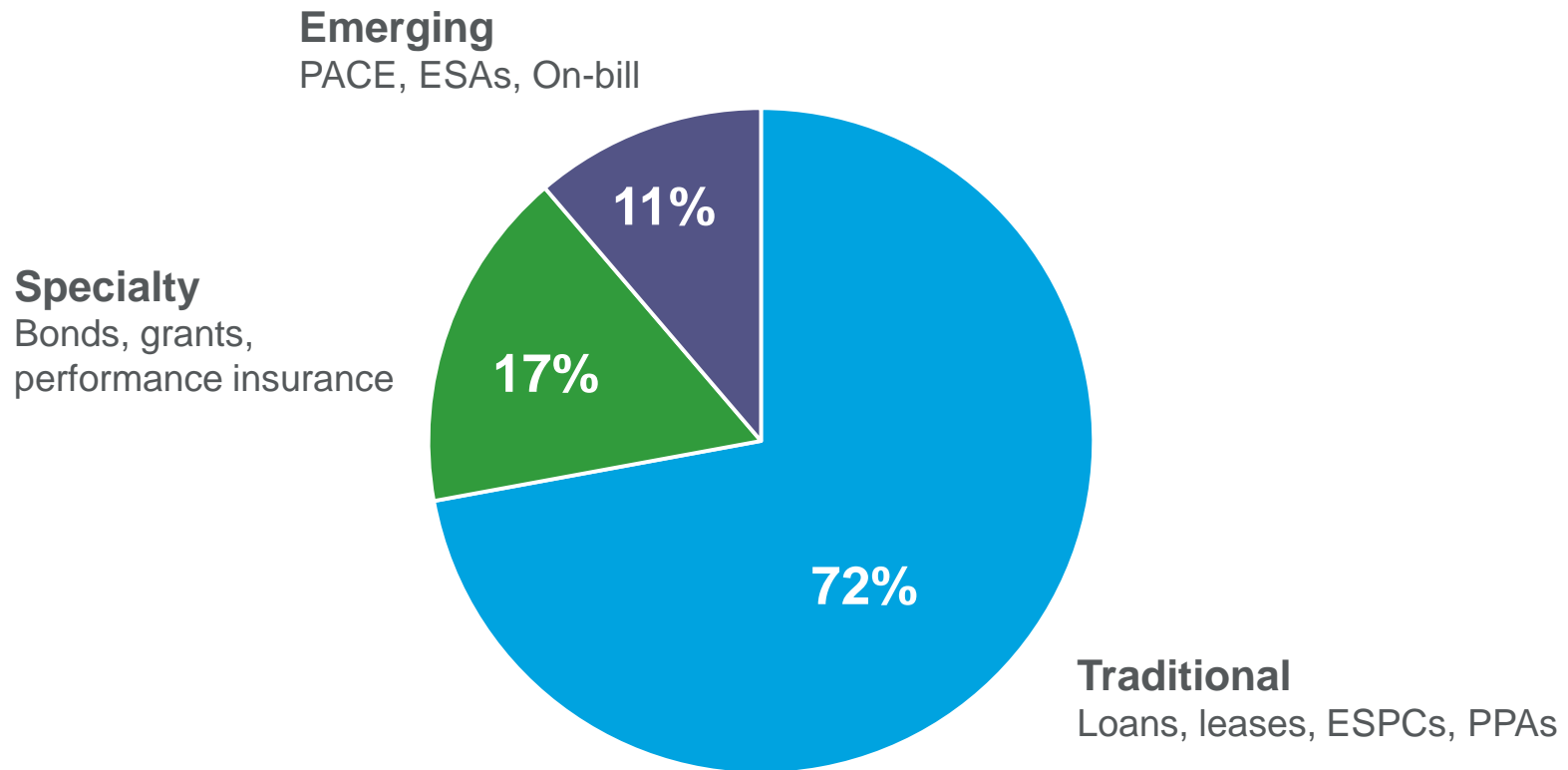
Cumulative Financial Ally Funding by Year



Key Takeaways:

- Allies funded \$2.4B in 2015, double the previous highest year
- Allies funded \$5.4B cumulatively between 2012 and 2015
- 5 Allies reported project-level data in 2015, including detailed information on 149 projects

Ally Funding by Product Type (2012-2015)

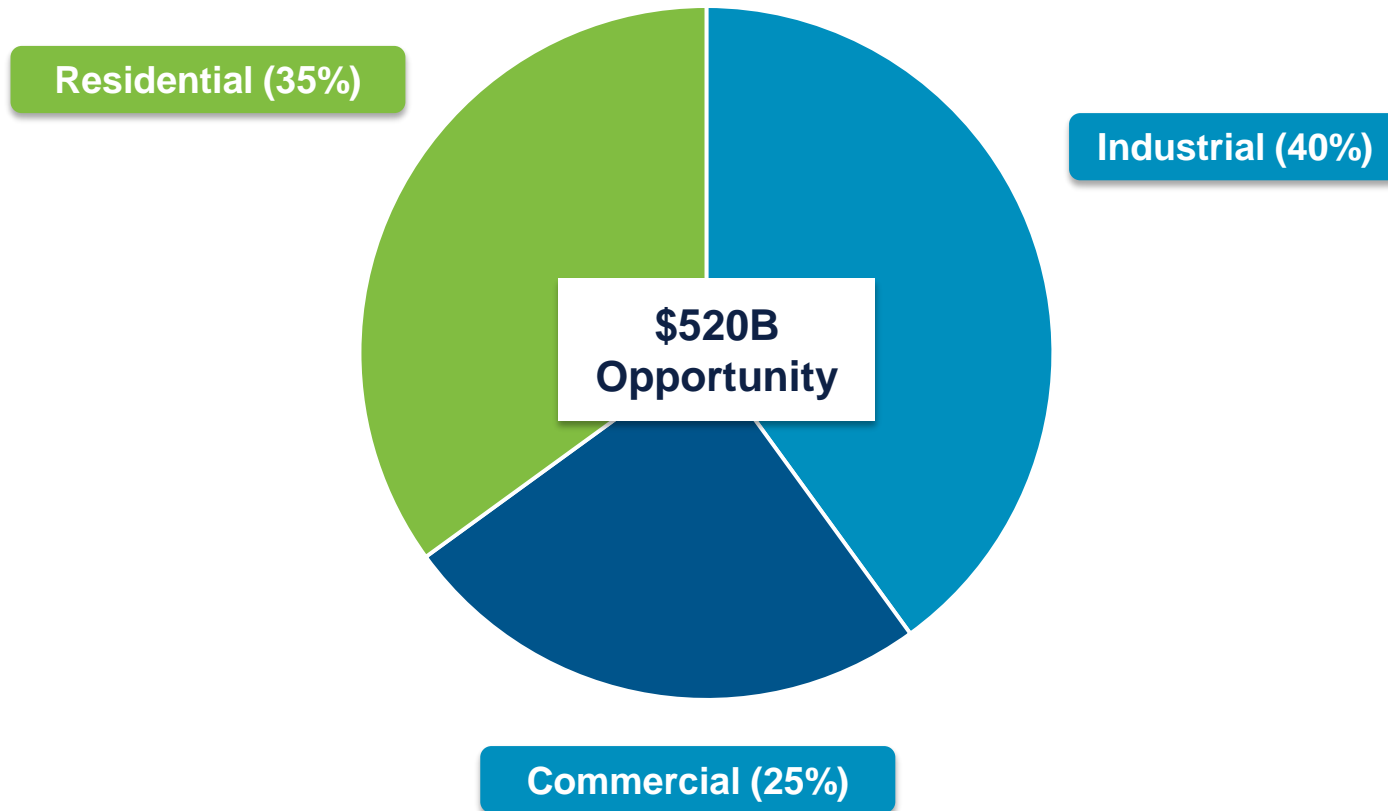


**Not shown: Reinvestment of equity and secondary market transactions*



“It’s the demand, stupid.”

Opportunity by Sector



Source: Unlocking Energy Efficiency in the U.S. Economy (McKinsey, 2009)

Commercial Opportunity by Building Size



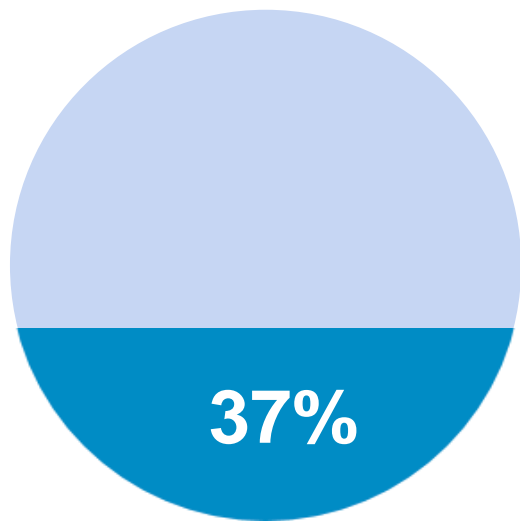
Large Buildings (53%)

- Buildings over 50,000 SF
- Typically support projects \$1M+

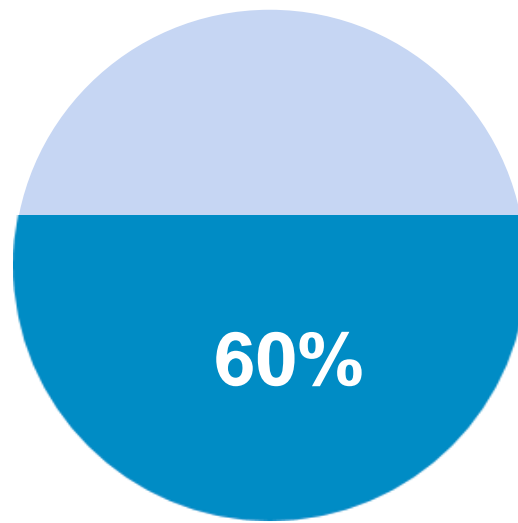
Small Buildings (47%)

- Buildings under 50,000 SF
- Projects often less than \$1M

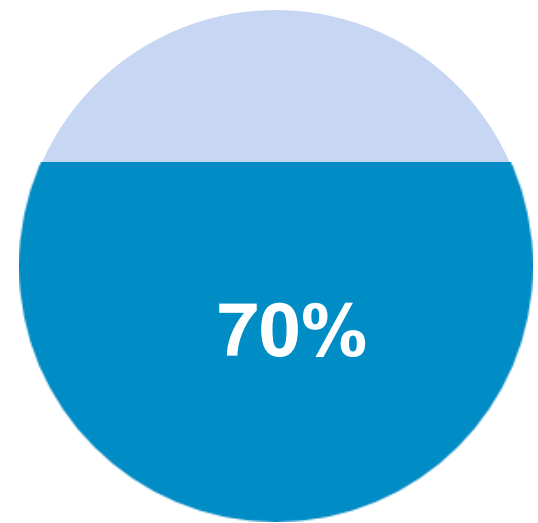
Easily accessible financing by project size



Under \$250k

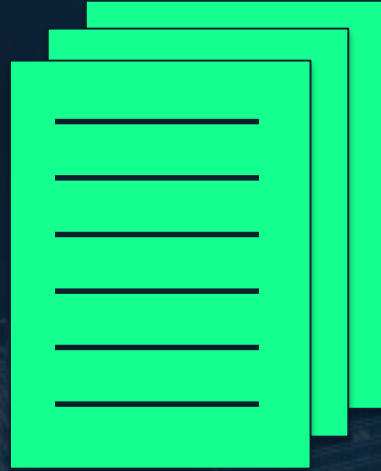


\$250k - \$1.5M



Over \$1.5M

Source: Efficiency Financing And Insurance Survey (Joule Assets, 2013)



**Finance hanging in
the balance (sheet)**



Proliferation of financial products

Products

Loans

Leases

ESPCs

Bonds

ESA

MESA

Grants

OBR/OBF

PACE



Attributes

Applicable sector

Regional availability

Typical project size

Balance sheet impact

Guaranteed savings?

Tax deductions

Collateral source

Typical contract term

Typical time to close

Market size



Lots of Complexity

 **Decision Fatigue**

 **Information Asymmetry**

Fewer Deals

A solution coming in 2016...



Energy Efficiency Financing Navigator

 **Energy Efficiency Financing Navigator**

Welcome to the Better Buildings Energy Efficiency Financing Navigator!
What would you like to do?



Explore financing options >



Find financing that is right for you >



Connect with the Financial Allies >

[More about the Navigator](#) [Give us feedback](#)

Begin on a simple splash page accessible from the BB Solutions Center

FIND FINANCING THAT FITS YOUR NEEDS

TELL US ABOUT YOUR ORGANIZATION

Sector

Commercial

State

DC

TELL US ABOUT YOUR PROJECT

Equipment Type

Lighting

Estimated Cost

\$100,000

Estimated Savings

\$25,000

Building Type

Office

Building Ownership

Owned

Owned

Leased

YOUR PREFERENCES

Do you want to consider internal or external financing?

External

Do you want the financing to be on or off balance sheet?

Off balance sheet, and this is a requirement

How important is it that the project provide guaranteed net savings?

Important

How important is it for you to claim depreciation benefits on the equipment?

Not important

How important is it that the savings generated by the project are measured and verified?

Important

How important is it to keep the duration of the financing contract short (e.g. less than 7 years)?

Not important

How important is minimizing complexity of the financing contract (i.e. shorter documents, fewer parties involved)?

Important

***Enter information about
your project...***

FINANCING OPTIONS

		OPTION 1	OPTION 2	OPTION 3	OPTION 4
		ESA	COMMERCIAL PACE	OPERATING LEASE	ESPC
BASIC ATTRIBUTES	Applicable Sectors	✓	✓	✓	○
	Applicable Technologies	Typical project size for an ESA is \$250k+, but your project size is \$100k. Some providers may support smaller projects.		✓	✓
	Project Size	○	✓	✓	✗
CONTACT STRUCTURE	Guaranteed Savings	✓	○	✗	✓
	Measurement & Verification	✓	✗	✗	✓
	Contract Complexity	○	○	✓	○
TAX & BALANCE SHEET	Balance Sheet Treatment	✓	✓	✓	○
	Tax Deductions	—	—	—	—
CONTRACT TERMS	Typical Duration	—	—	—	—
	Typical Close Time	○	○	✓	✗
	Typical Interest Rate	—	—	—	—
MARKET ATTRIBUTES	Time in Market	—	—	—	—
		CONNECT WITH PROVIDERS	CONNECT WITH PROVIDERS	CONNECT WITH PROVIDERS	CONNECT WITH PROVIDERS

...and see tailored suggestions that map your preferences to available options.

✓ MATCH
○ PARTIAL MATCH
✗ NOT A MATCH
— INDIFFERENT

EXPLORE FINANCING OPTIONS

BROWSE BY:

Balance Sheet



Does the asset or financing most commonly appear on or off the customer's balance sheet according to standard industry best practices?

ON BALANCE SHEET

▶ Debt or Loan Financing

▶ Capital Lease

▶ On-Bill Financing

▶ Municipal Lease

▶ QECCB

OFF BALANCE SHEET

▶ ESA

▶ Operating Lease

▶ CPACE

▶ Grant Funding

UNDETERMINED / VARIABLE

▶ ESPC

▶ PRI

▶ Tax-exempt PACE

▶ Crowdfunding

NOT APPLICABLE

▶ Internal CapEx

▶ Internal OpEx

▶ Green Revolving Fund

▶ Stakeholder Fundraising

▶ Performance Insurance

You can also explore options by sorting on different attributes...

EXPLORE FINANCING OPTIONS

	BASIC ATTRIBUTES			CONTRACT STRUCTURE			TAX & BALANCE SHEET		CONTRACT TERMS			MARKET ATTRIBUTES	
	APPLICABLE SECTORS	SORT		GUARANTEED SAVINGS	MEASUREMENT & VERIFICATION	CONTRACT COMPLEXITY	BALANCE SHEET TREATMENT	TAX DEDUCTIONS	TYPICAL DURATION	TYPICAL CLOSE TIME	TYPICAL INTEREST RATE	TIME IN MARKET	MARKET SIZE
Debt or Loan Financing	All	FILTER <input checked="" type="checkbox"/> SELECT ALL <input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Industrial <input type="checkbox"/> MUSH <input type="checkbox"/> Non-Profit		No	No	Low	On balance sheet	Depreciation, Interest	[TBD]	Short	[TBD]	[TBD]	[TBD]
Capital Lease	All			No	No	Low	On balance sheet	Depreciation, Interest	[TBD]	Short	[TBD]	[TBD]	[TBD]
Operating Lease	All	All	Any	No	No	Low	Off balance sheet	All Payments	[TBD]	Short	[TBD]	[TBD]	[TBD]
ESPC	MUSH, Commercial, Industrial	All	\$1M+	Yes	Yes	Medium	Variable	Variable	[TBD]	Medium	[TBD]	Since the late 1990s	\$4.8B
ESA	MUSH, Commercial, Industrial	All	\$250k - \$10M	Yes	Yes	Medium	Off balance sheet	All Payments	[TBD]	Medium	[TBD]	[TBD]	[TBD]
On-Bill Financing	All	All	\$5k - \$350k	No	No	Low	Variable	Variable	[TBD]	Medium	[TBD]	[TBD]	[TBD]
PACE	All	All	\$250k - \$10M	No	No	Medium	Of balance sheet	All Payments	[TBD]	Medium	[TBD]	Since 2007	\$176M
Grant Funding	Non-Profit, MUSH	All	[TBD]	No	No	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]
Program-Related Investments	Non-Profit, MUSH	All	[TBD]	No	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]
Below-Market Loans	Non-Profit, MUSH	All	[TBD]	No	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]
Municipal Tax-Exempt Lease	All	All	[TBD]	No	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]
Tax-exempt PACE	Non-Profit, MUSH	All	[TBD]	No	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]
QECB	MUSH	All	[TBD]	No	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]
Crowdfunding	All	All	[TBD]	No	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]
Performance Insurance	All	All	[TBD]	Yes	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]
Internal CapEx	All	All	[TBD]	No	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]
Internal OpEx	All	All	[TBD]	No	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]
Internal green revolving fund	All	All	[TBD]	Sometimes	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]
Internal stakeholder fundraising	All	All	[TBD]	No	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]	[TBD]

...or view the full table of options and filter as desired.

CONNECT WITH FINANCIAL ALLIES

SHOW ME ALLIES THAT OFFER:

Leases



Bank of America
Merrill Lynch

Bank of America Merrill Lynch

 **METRUS ENERGY**

Metrus Energy

BioStar Lighting

BioStar Lighting


Rockwell
FINANCIAL GROUP

Rockwell Financial Group


COMMERCIAL
POWER
PARTNERS

Commercial Power Partners

 **SparkFund**

SparkFund

Finally, connect with Financial Allies that offer specific products and services.



**How can DOE help
unlock the
financing market?**



Better Buildings[®]
CHALLENGE
U.S. DEPARTMENT OF ENERGY

Thanks!

Joe Indvik, JDM Associates

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Preliminary commercial market size estimates

Commercial PACE:	\$230M cumulative
On-Bill Programs:	\$170M cumulative since 2000
ESCO Business:	\$5.2B since the 1990s
Green Bonds:	\$1.5B
Loans & Leases:	Difficult to parse

Trends in customer experience

Integration

with service providers
and marketplaces

Simplification

of customer process

SASification

of customer experience
using technology

Balance sheet status

ON

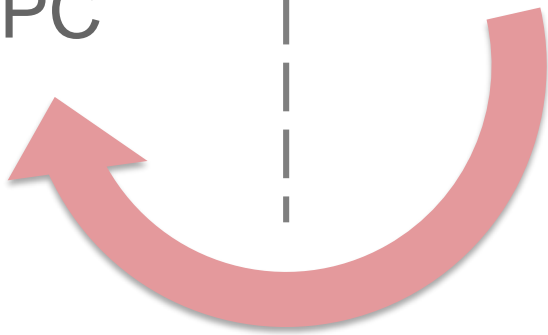
Loan
Capital Lease
ESPC

OFF

ESA/MESA
Operating Lease

**IT'S
COMPLICATED**

PACE
OBR/OBF





Customer experience

Deal origination channels

90/10

Channel Partnerships

Direct-to-customer