

THE AIA 2030 COMMITMENT: BUILDING ENERGY LITERACY

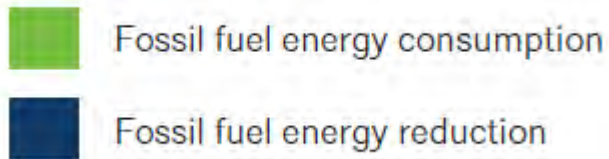
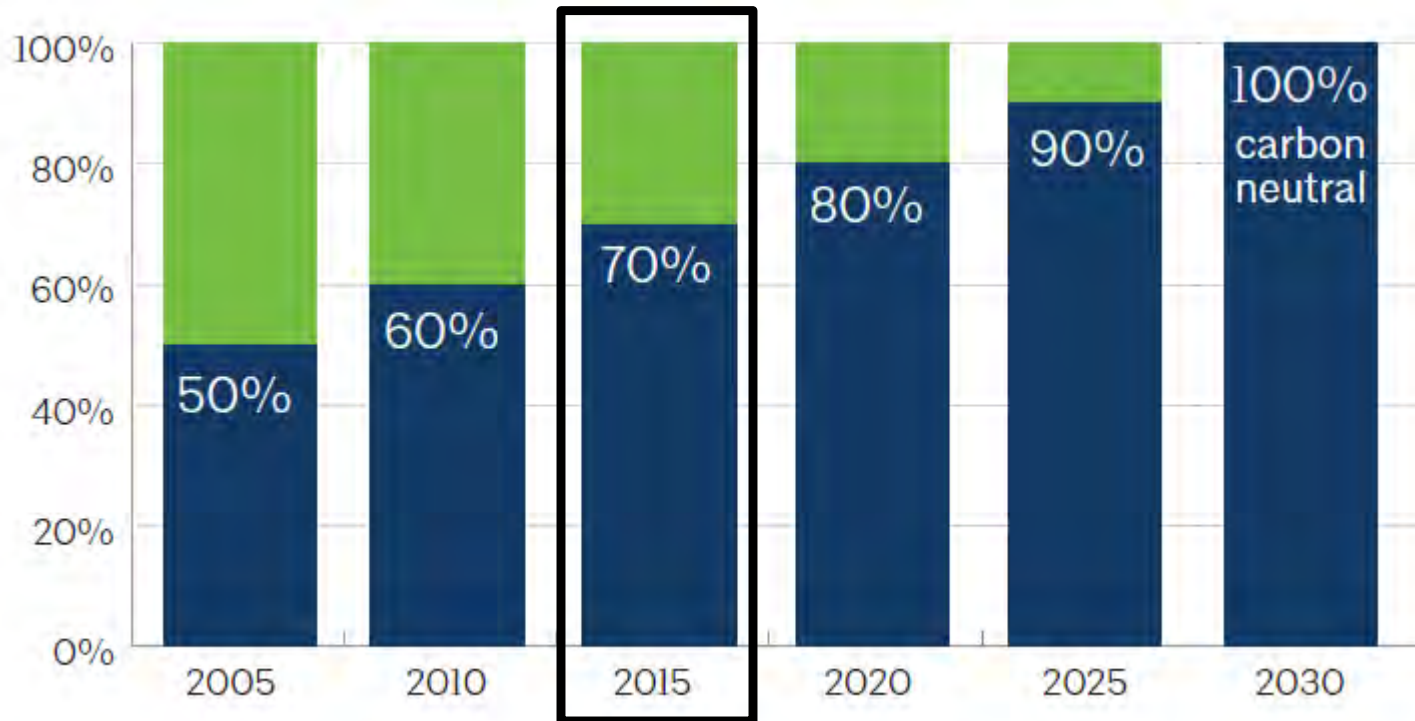
ANDREA LOVE AIA LEED Fellow, DIRECTOR OF BUILDING SCIENCE, PAYETTE

DEE SPIRO LEED AP, DIRECTOR OF SUSTAINABILITY, BERGMAYER

STEPHANIE HOROWITZ, AIA CPHC, MANAGING DIRECTOR, ZEROENERGY DESIGN

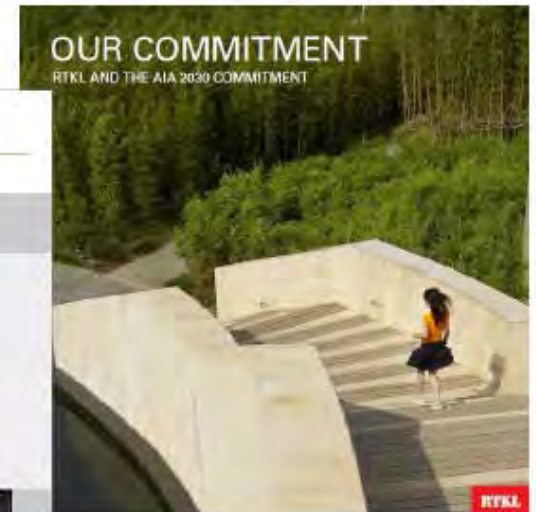
March 10, 2017

2030 OVERVIEW | TARGETS



OPERATIONAL EFFICIENCY

Long range sustainability action plan that aligns with the stated 2030 benchmarks for achieving carbon neutrality.



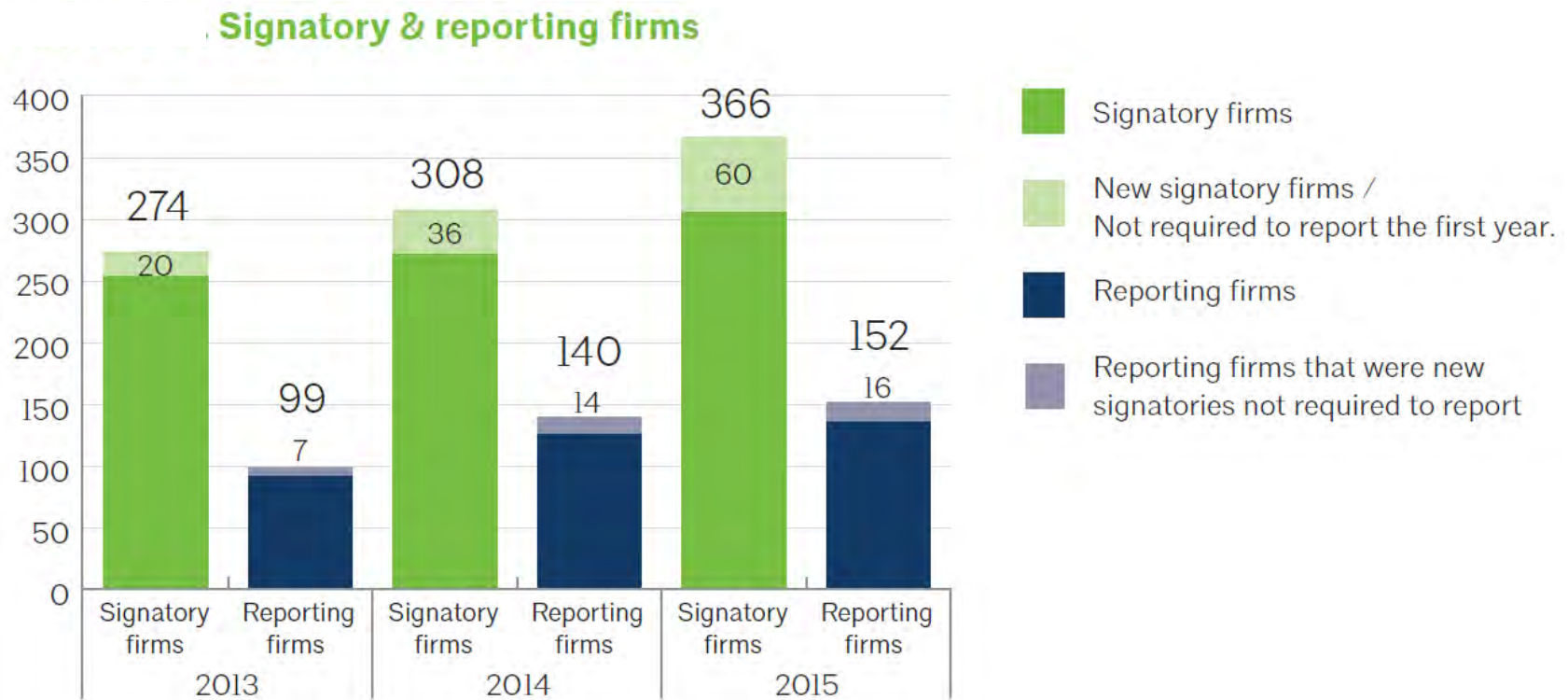
AIA 2030 Commitment
Sustainability Action Plan
2012

2015 REPORTING DATA

The Program Continues to Grow

Number of signatory firms increased by **19%**

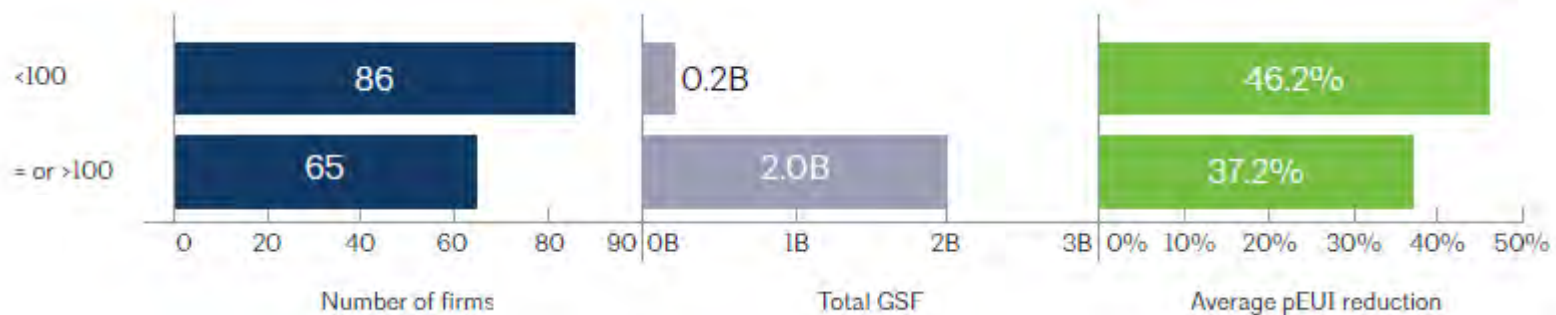
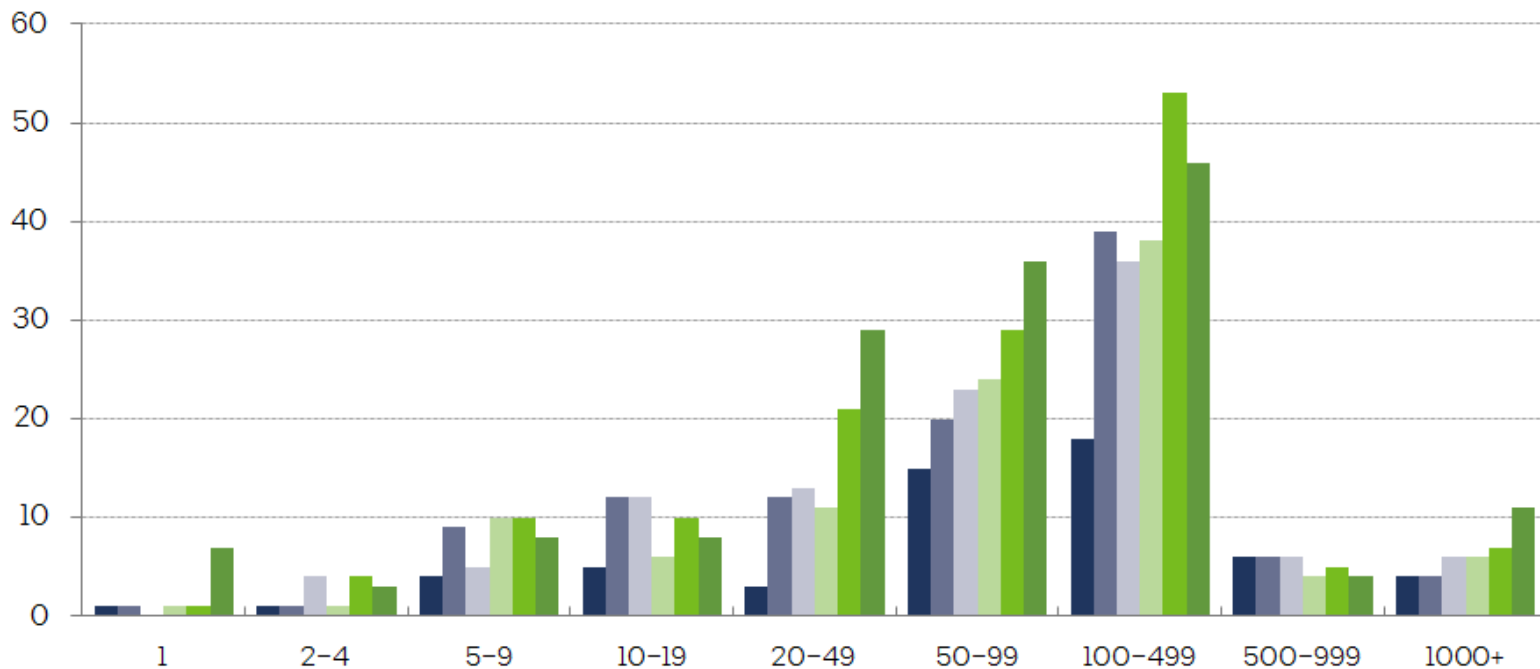
The Institute is focused on increasing value to small firms



2015 REPORTING DATA

Number of Reporting Firms by Staff Size Over Time

■ 2010 ■ 2011 ■ 2012 ■ 2013 ■ 2014 ■ 2015



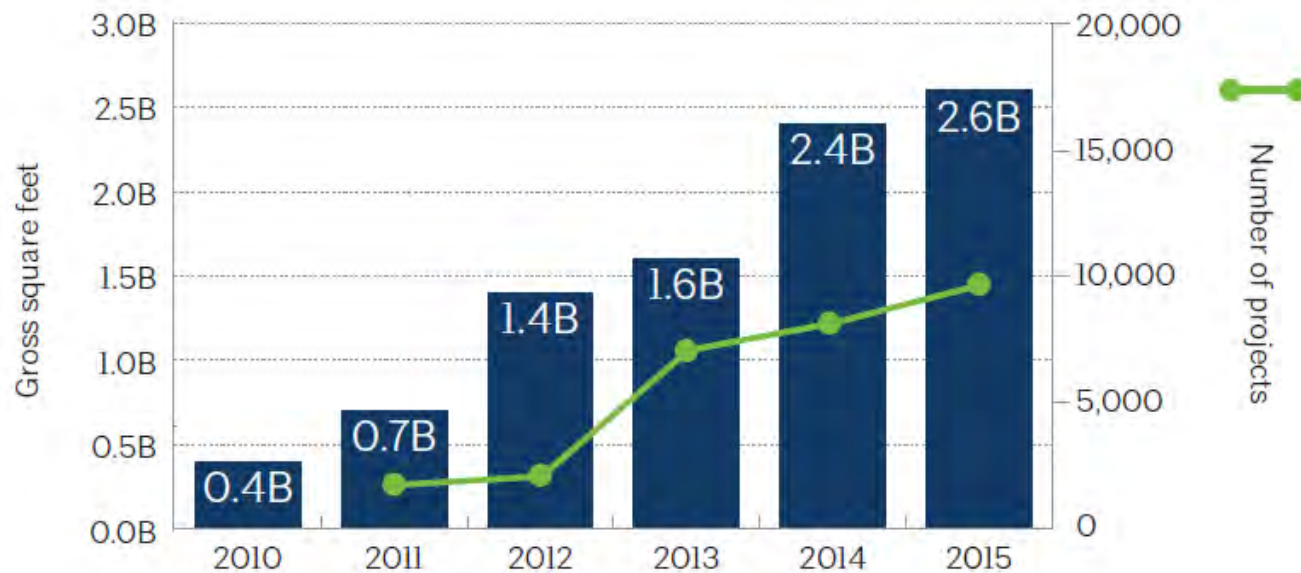
2015 REPORTING DATA

Total Area Reported

Continue to see more projects than ever are being reported

Building area reported increased to 2.6B GSF – **8.3% increase**

Total reported area (GSF) and total number of projects



Data for total number of projects is unavailable for 2010.



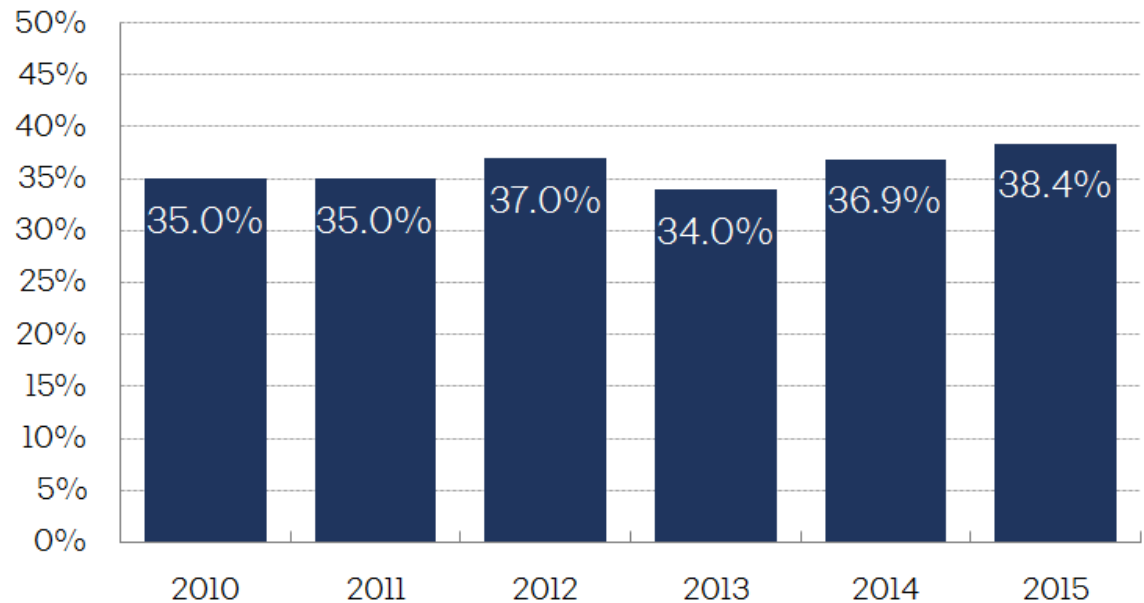
2015 REPORTING DATA

Predicted Project Performance

Average pEUI increased by **1.5%** but remained mostly flat across all reporting years

Time to meet the challenge!

Percent Mean pEUI Reduction from the National Average



2015 REPORTING DATA

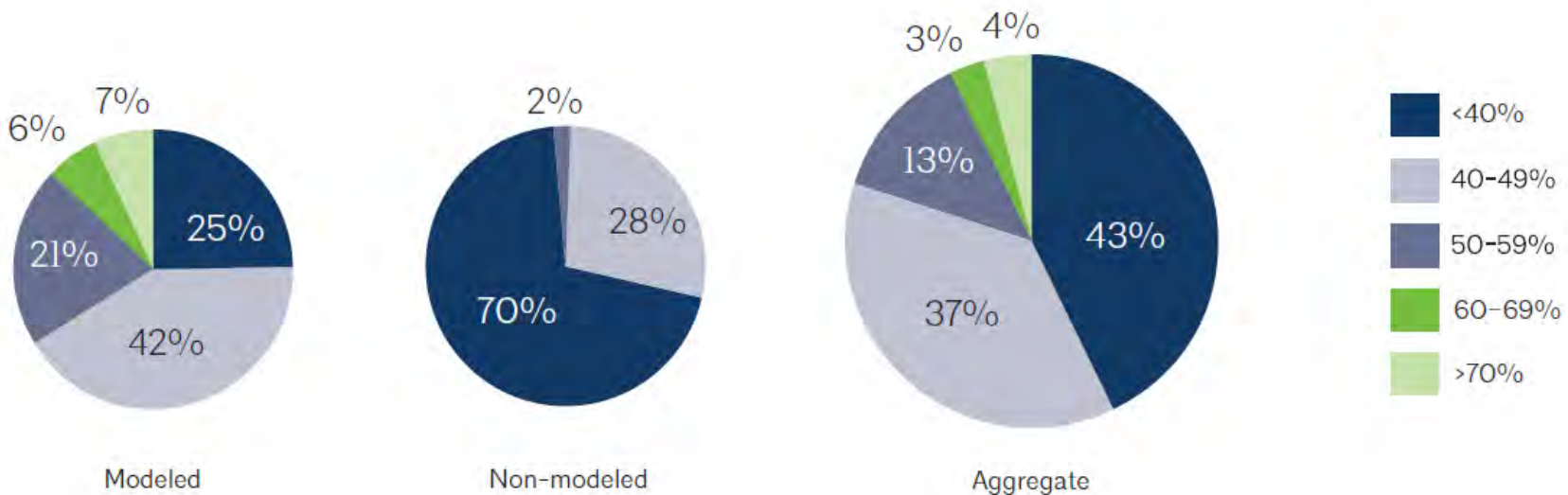
The Impact of Modeling

59% of projects used energy modeling

41% of projects used code equivalent baselines

Only Modeled Projects reach the reduction targets

Percent Improvement by pEUI Reduction Bins



2015 REPORTING DATA

Whole building projects by use type

Use type	Average pEUI reduction	Number of projects	Total GSF (million)	Average GSF	Average EUI*
Assembly	40.8	530	93.3	176,011	52
Higher education	40.7	428	47.0	109,857	82
K-12 education	43.7	413	32.3	78,268	45
Laboratory	46.3	198	25.5	128,712	201
Healthcare	38.1	606	131.0	216,222	125
Office	42.1	1,076	455.2	423,012	60
Retail	32.8	650	379.0	583,014	75
Multi-family residential	41.8	640	204.5	319,554	42
Single-family residential	46.4	155	1.5	9,348	26
Mixed Use	35.8	679	619.4	912,261	61
Other	38.3	607	213.6	351,842	103



2015 REPORTING DATA

Interiors projects by use type

Use Type	Average pEUI reduction	Number of projects	Total GSF (million)	Average GSF
Assembly	28.2	67	3.1	45,545
Higher education	27.3	79	2.2	27,456
K-12 education	2.3	63	10.7	169,111
Laboratory	19.0	96	1.7	17,802
Healthcare	25.5	433	8.8	20,328
Office	28.1	800	40.5	50,666
Retail	35.3	142	2.0	14,097
Mixed use	30.9	39	3.4	87,693
Other	18.1	58	2.5	43,123



2015 Key Takeaways

- We can only meet 2030 targets with energy modeling.
- More firms are signing on. Good potential for more reporting next year.
- The pEUI reduction and overall GSF continues to grow and improve. But not as fast as we would like.
- The DDx is a new tool with greater value propositions.



TESTIMONIALS

- “...DDx allows us to learn from our past projects and utilize that knowledge to constantly improve...” - Nathan Kipnis, FAIA, Principal, Kipnis Architecture + Planning
- “Being able to access the data and see immediate results on how our projects are performing created a bit of a ‘wow factor’ that has gotten people within the firm excited and more engaged...” - Melissa DeStout, project architect with Perkins Eastman.



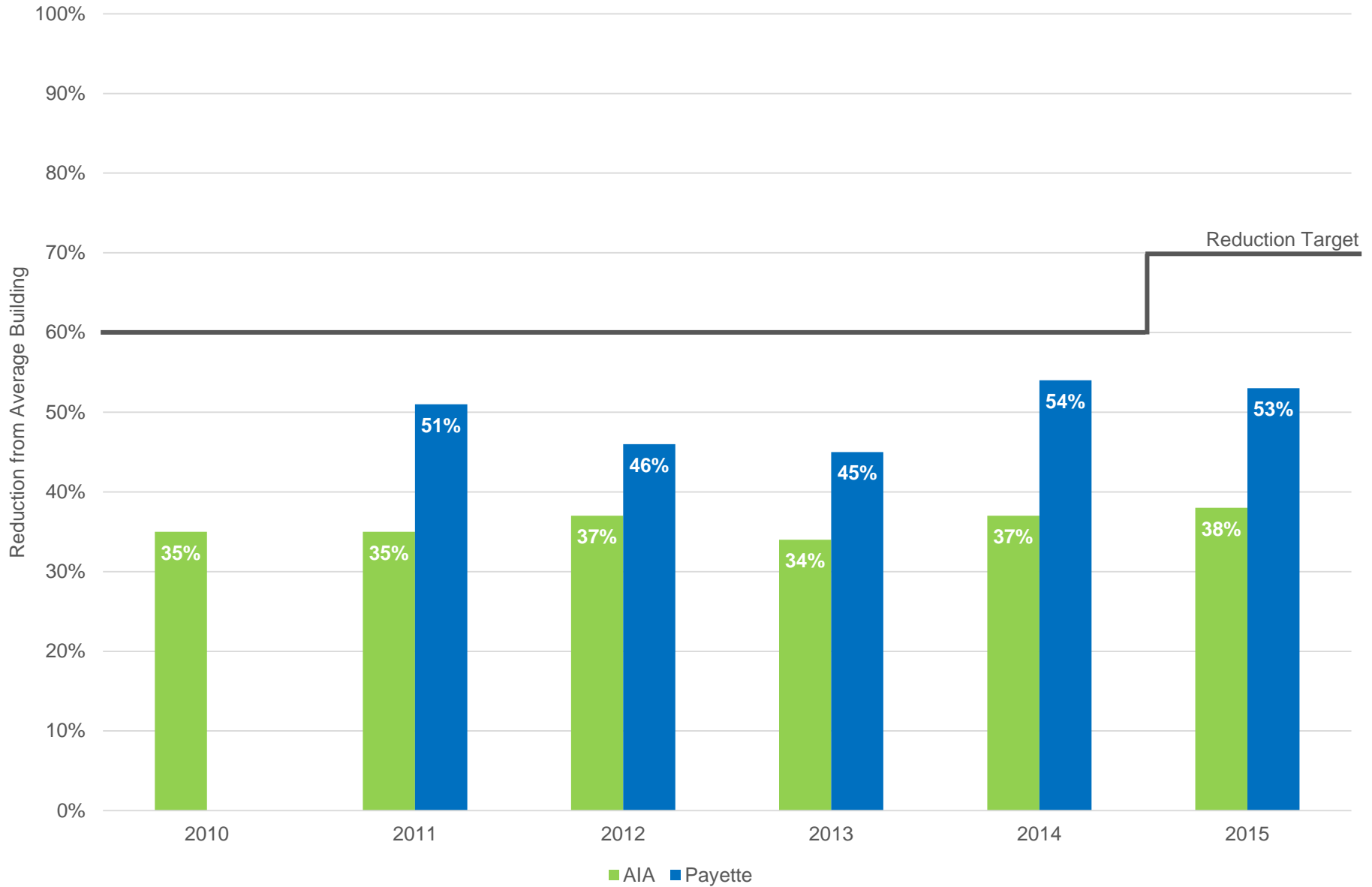


Let's go live!
(if we can)

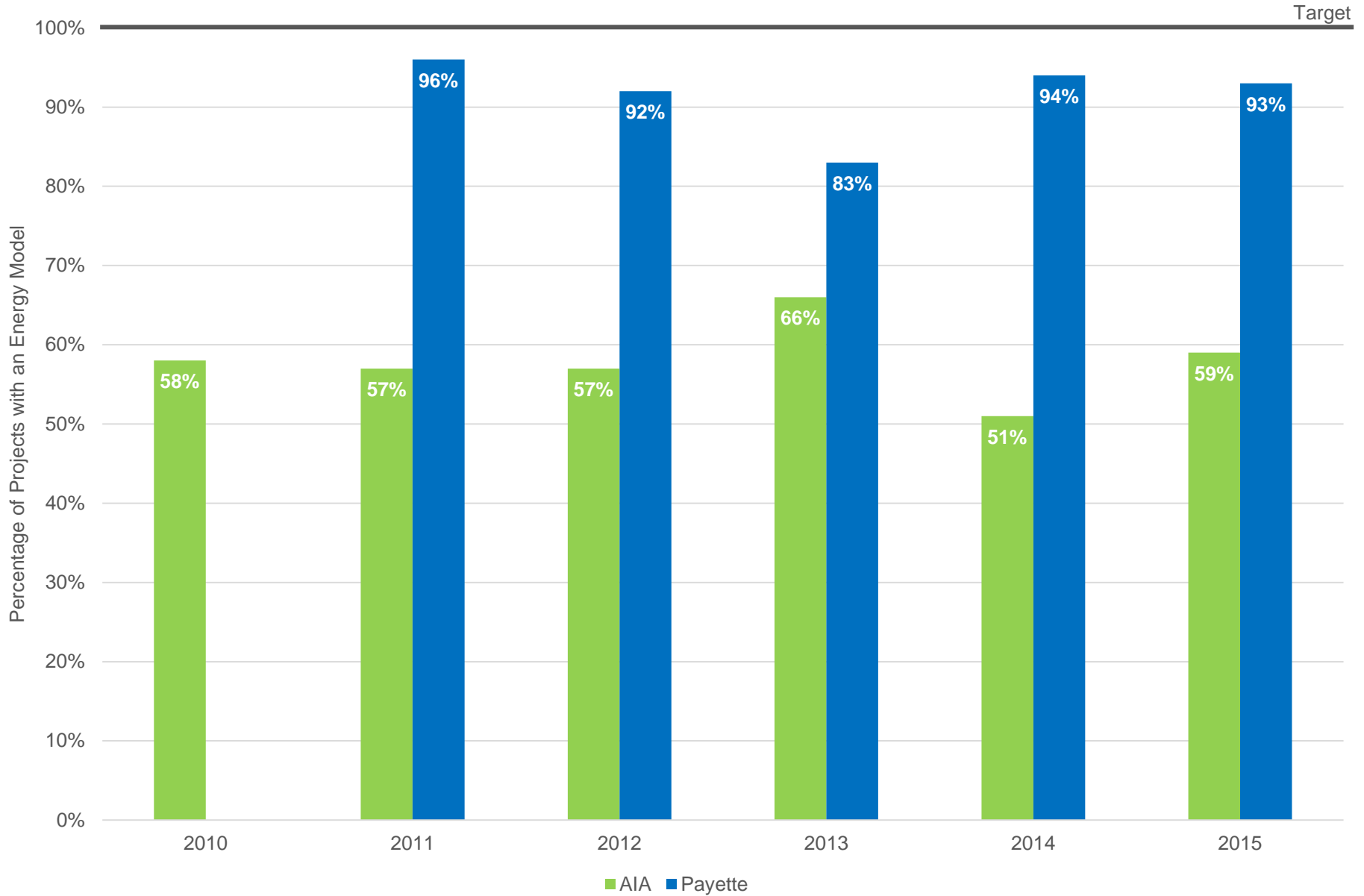


- 140-person, Boston based office
- Research and Healthcare Focus
- Integrated Building Science Group

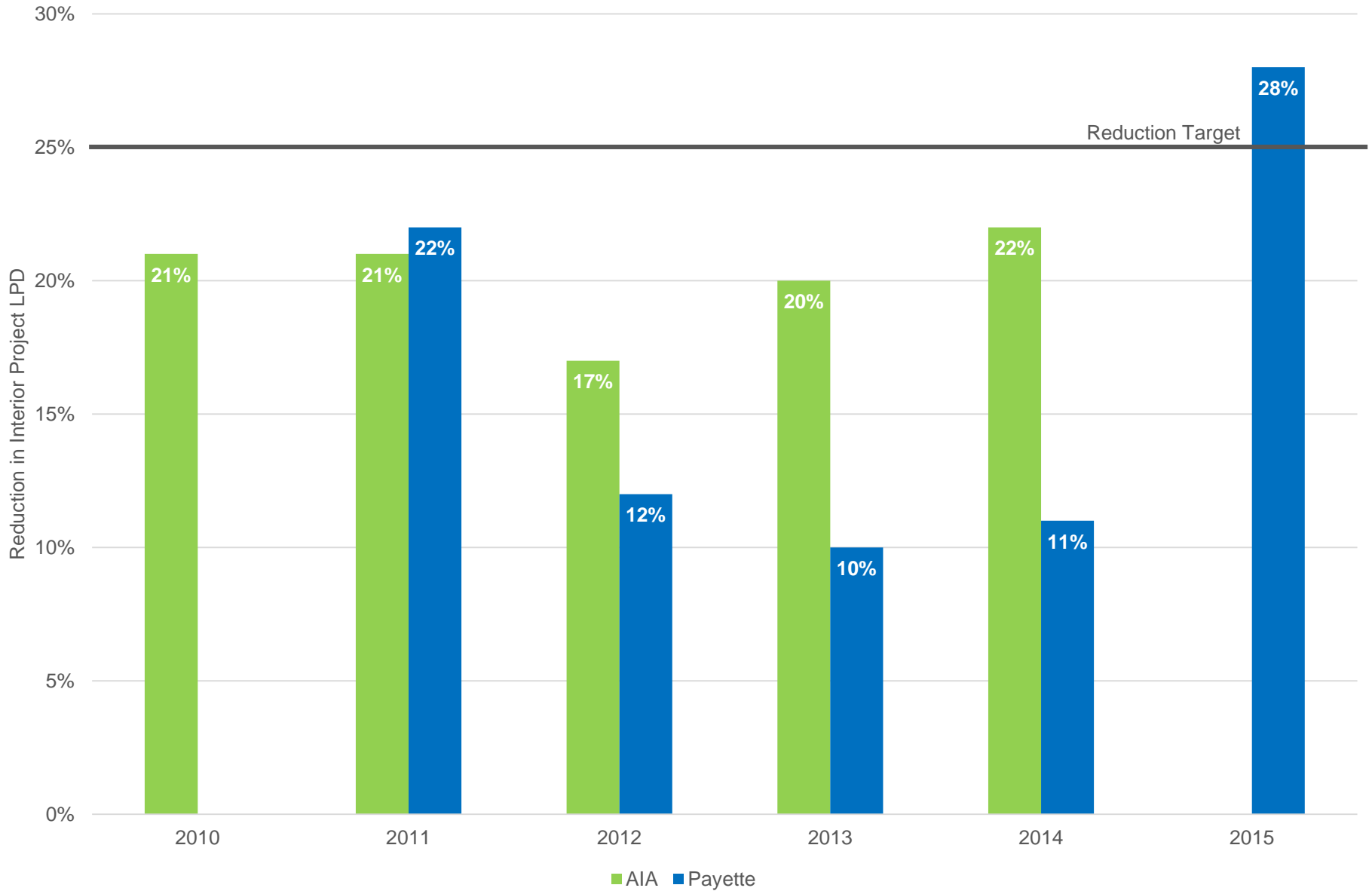
PROGRESS TOWARDS GOALS | EUI REDUCTION



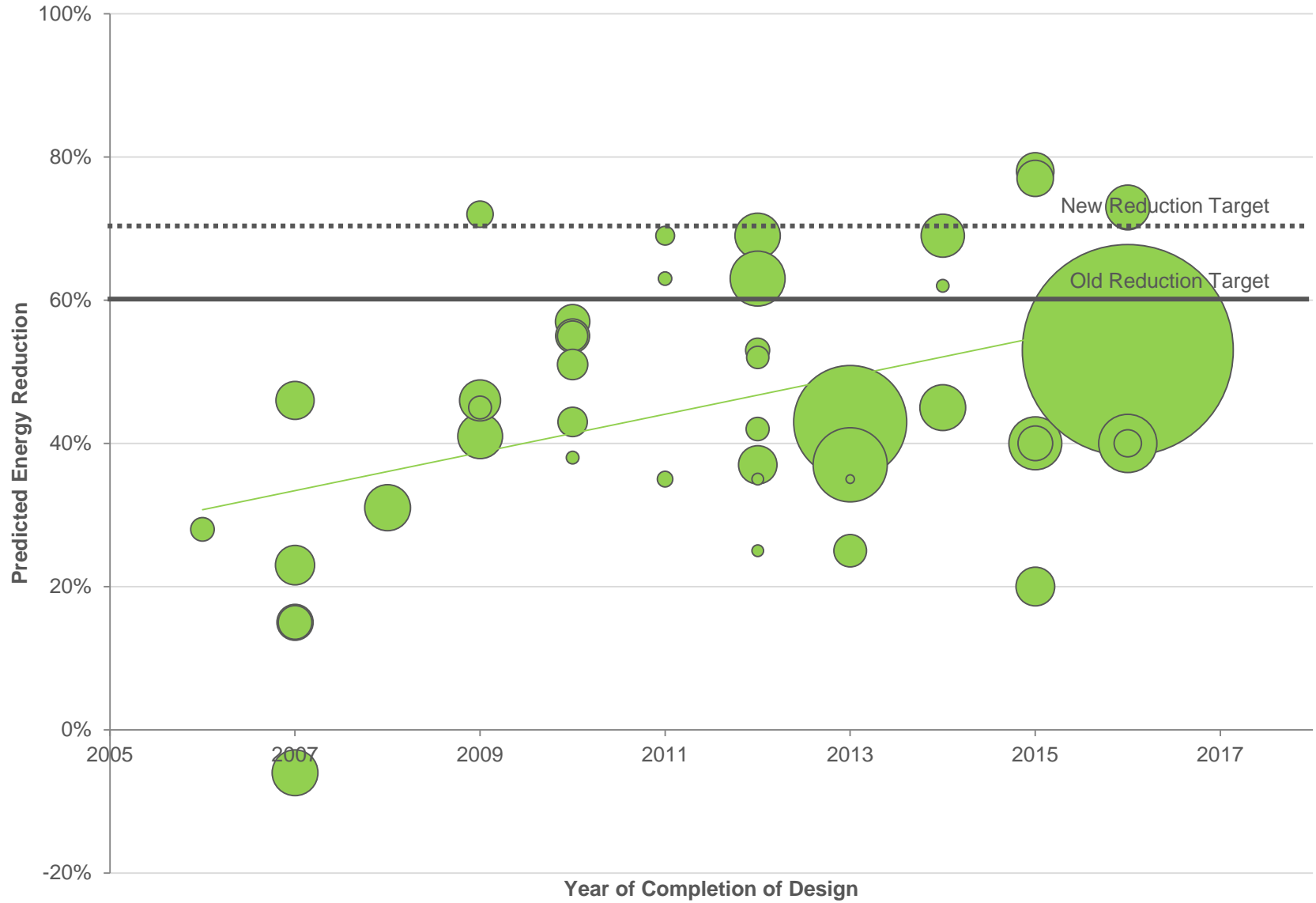
PROGRESS TOWARDS GOALS | PROJECTS WITH ENERGY MODELS



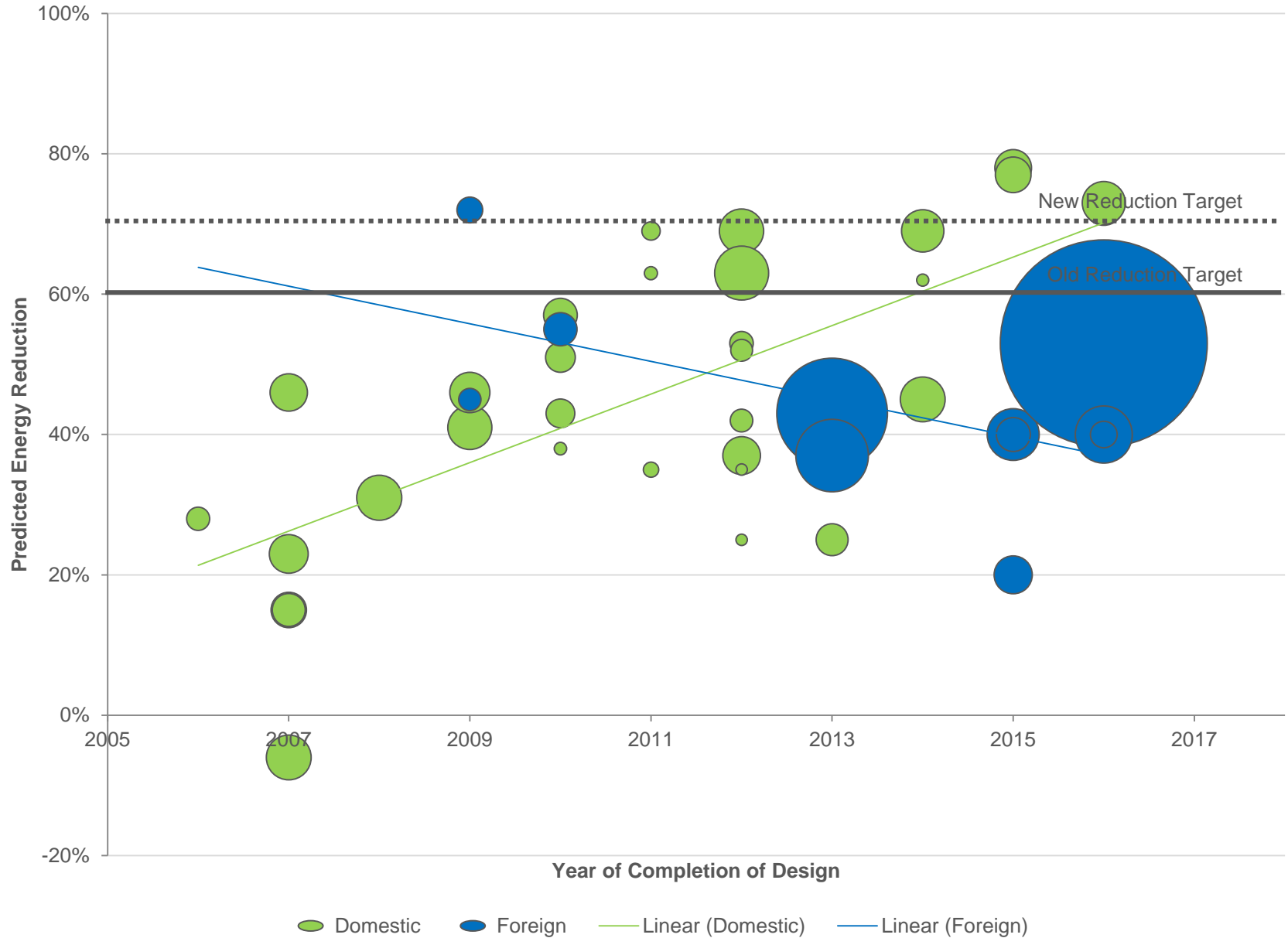
PROGRESS TOWARDS GOALS | INTERIOR PROJECTS



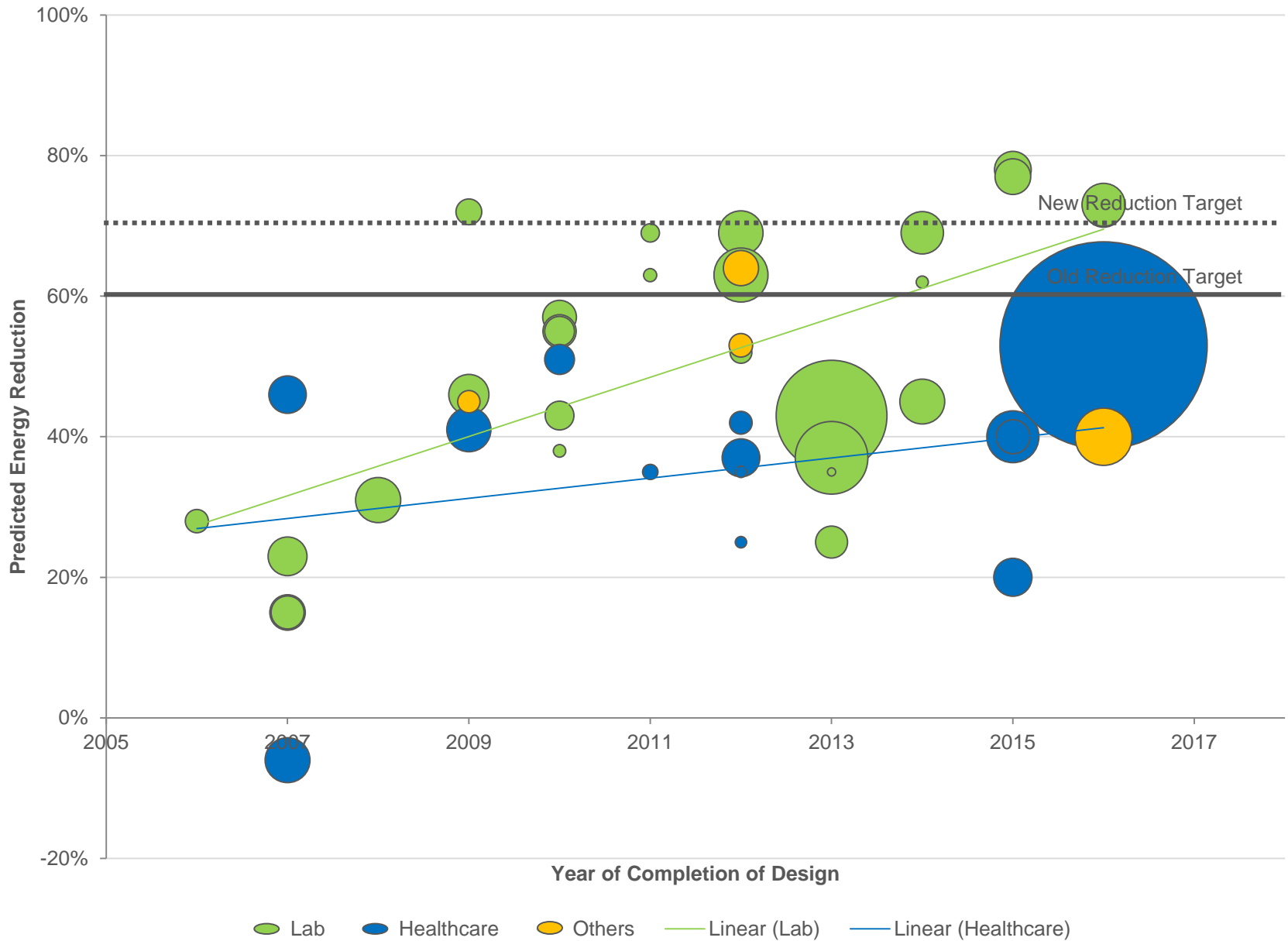
PROGRESS OVER TIME



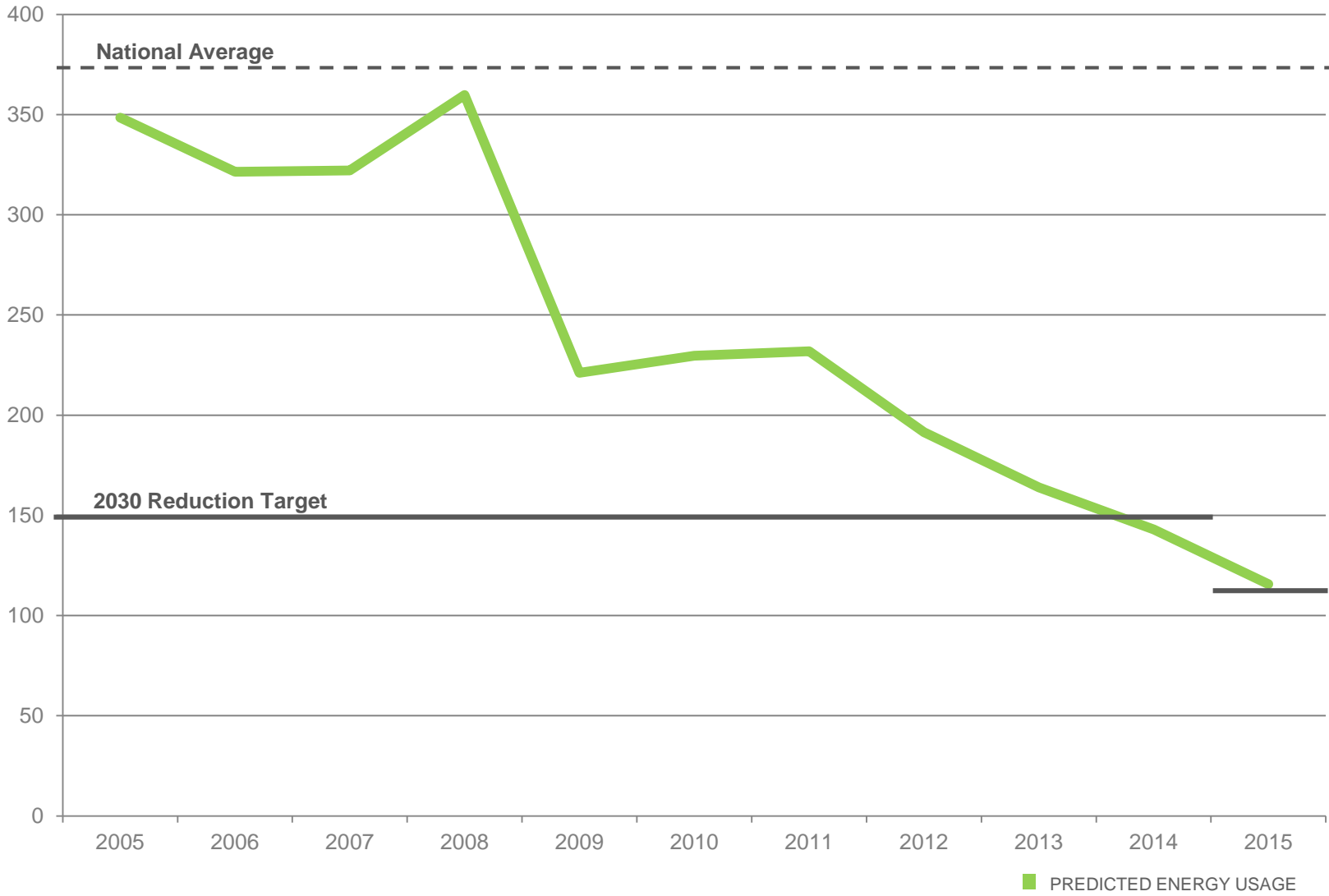
IMPACT OF INTERNATIONAL WORK



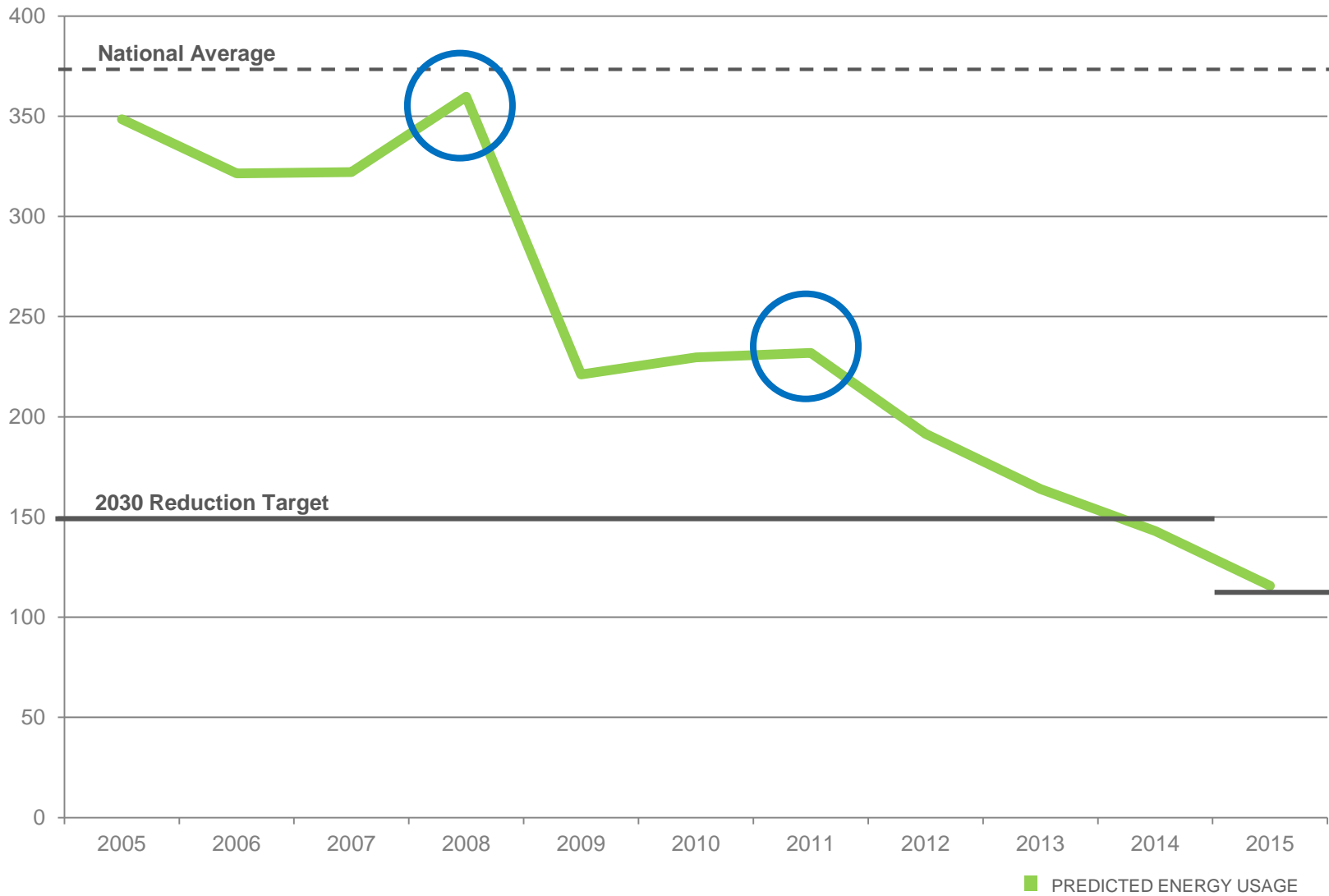
MARKET SECTOR



BY MARKET SECTOR - LABS



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