

Small Steps, Big Changes

How to Begin Championing
Net-Zero Goals in your office

NET ZERO EMERGING LEADER INTERNSHIP

GBD ARCHITECTS | ENERGY TRUST OF OREGON

GBD

The urban built environment is responsible for **75%** of annual global GHG emissions: buildings alone account for **39%**.

Eliminating these emissions is the key to addressing climate change and meeting Paris Climate Agreement targets.

https://architecture2030.org/2030_challenges/2030-challenge/



GAUGING WHERE YOUR FIRM IS AT:

QUICK SELF - CHECK

Are you using the AIA Design Data Exchange?

Do you keep a LEED Portfolio?

Do you have and use a Sustainability Action Plan?

Building codes are changing - are you ready?

What are your daily office practices for sustainability?

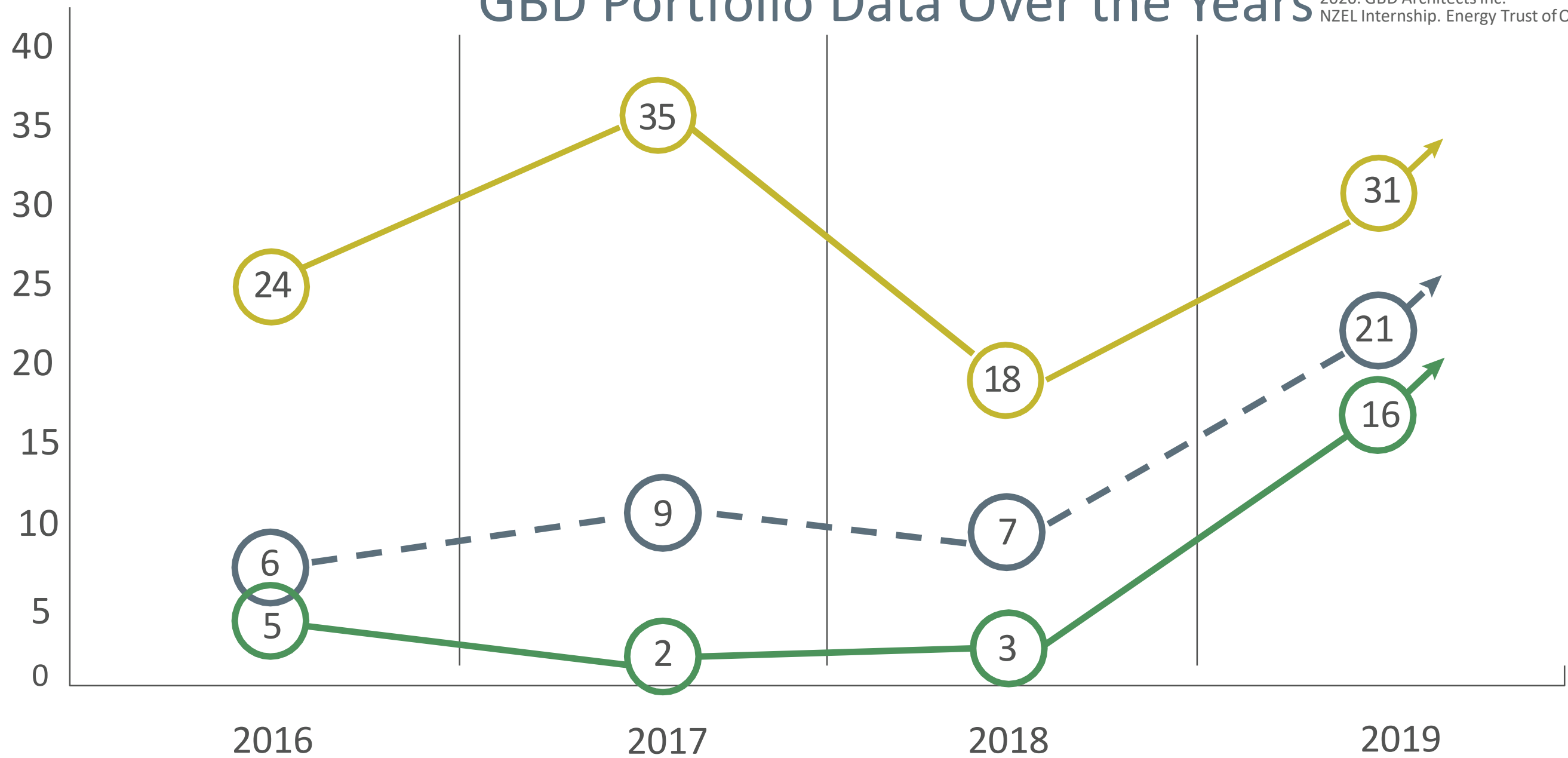
What are you wanting to learn more about?



INTERPRETING WHAT IS ALREADY BEING ACCOMPLISHED...

GBD Portfolio Data Over the Years

2020. GBD Architects Inc.
NZEL Internship. Energy Trust of Oregon.



GBD Signed the
2030 Commitment

NZEL Internship
Hired Sustainability Manager

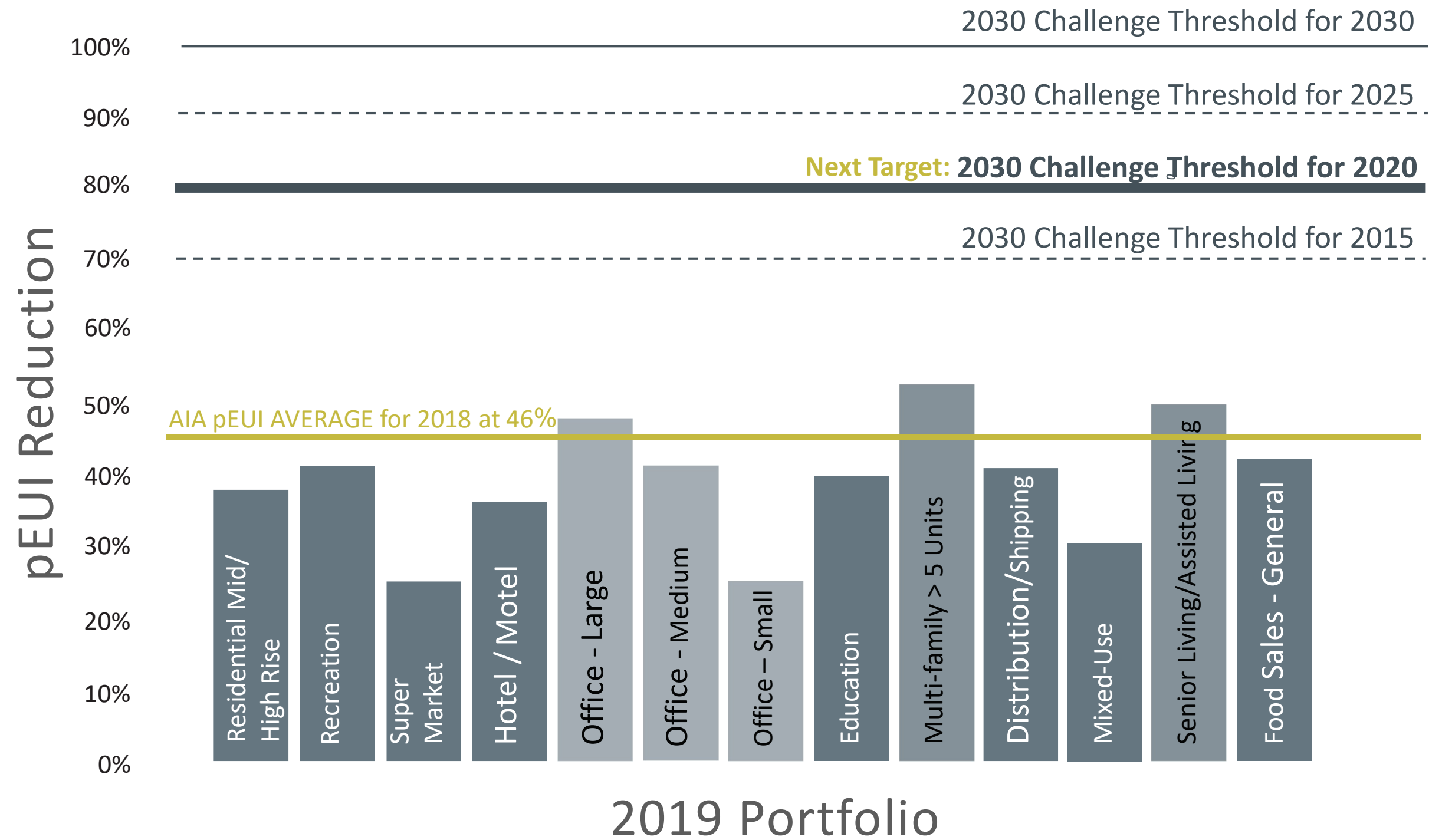
Number of Active Projects Number of Projects Energy Modeled LEED Projects



WHAT DOES THE DATA TELL US? CLOSING THE GAPS

Predicted EUI Reduction x GBD 2019 Portfolio

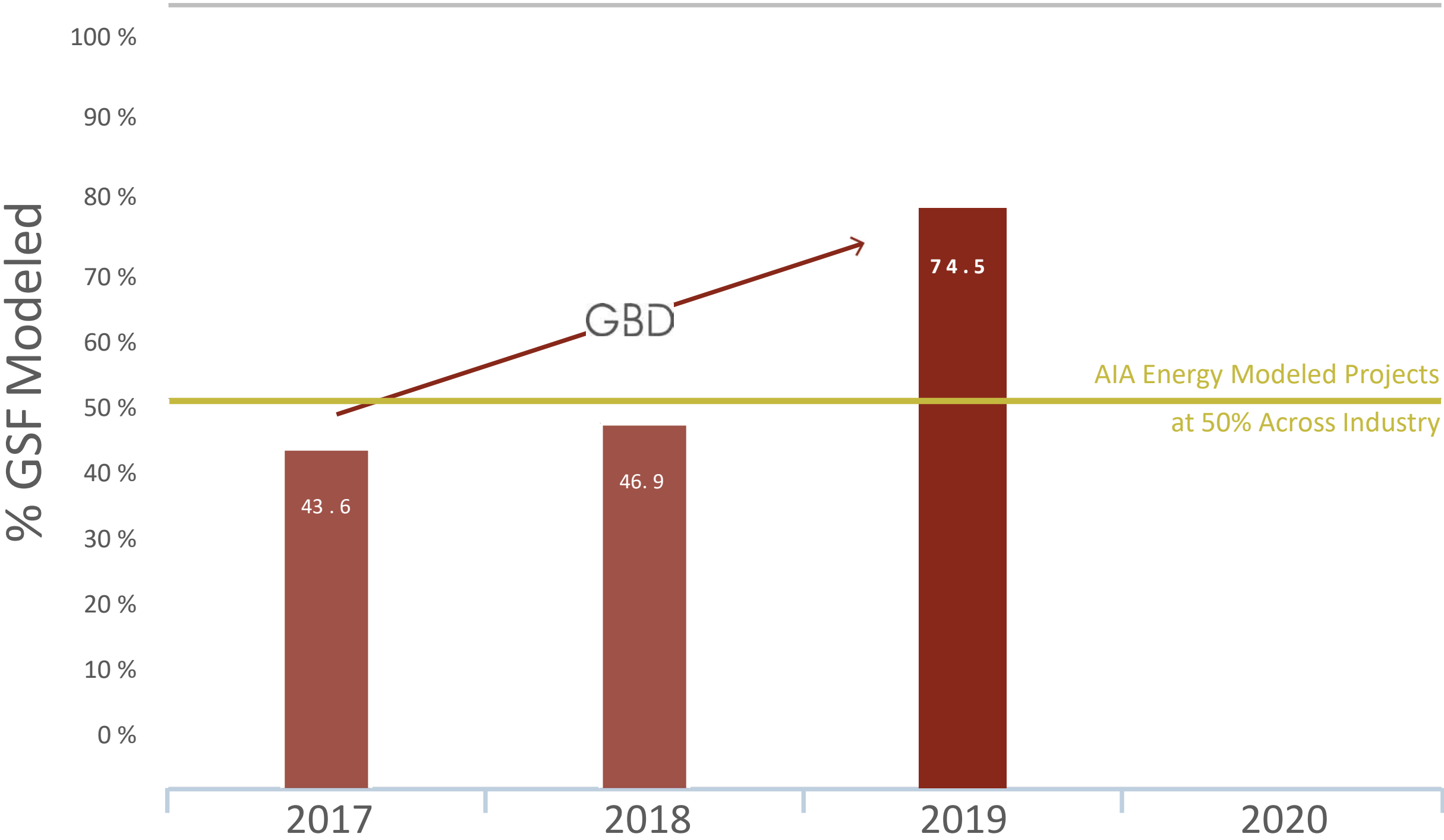
2020. GBD Architects Inc.
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WHAT DOES THE DATA TELL US? CLOSING THE GAPS

GBD Portfolio GSF% Modeled Over Years

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UTILIZE YOUR TOOLBOX

What tools do we have to succeed?



Design Data Exchange (DDX)



Energy Trust of Oregon



Sustainability Action Plan



Energy Modeling



Project Phase Report Card



Sustainability Team



LEED Archives



Continuing Education +
Certification opportunities for staff

Design Data Exchange (DDX)

- Cross Industry Comparison
- Open Source Resource

Energy Trust of Oregon

- Can provide funding for Energy Modeling
- Early Design Assistance

Sustainability Action Plan

- Goal setting tool that fosters best practice
- An educational tool to communicate with clients
- Industry wide commitment

Energy Modeling

- eQuest (Quick + Free)
- IES Virtual Environments (Most Popular)
- TRACE 700 (Load Design + Energy)
- Insight 360 (Autodesk, Revit Plug-in)
- Climate Consultant (site analysis/conditions)
- COMFEM (windows + daylighting analysis)
- 2030 Palette - 2030 challenge precedent examples

CULTIVATING PORTFOLIO TRANSPARENCY ACROSS FIRM + INTO DESIGN PROCESS

Tracking and reporting can not only bring transparency to a firm but also serve as a platform for friendly in-house competition.

Project teams can compete with one another to meet and exceed sustainability goals set by the office.

GOING BEYOND THE STATUS QUO

At the forefront of the National Resilient Cities' trend, GBD pushed the boundary of what is possible with the design of the Lloyd Eco-District of Hassalo on 8th. ***The project was the first to globally achieve (LEED V4 ND) Platinum certification for neighborhood development.***

59.5%

Increase in Project
Energy Modeling
From 2018.

67.7%

Of Active Projects
In 2019 had been
Energy Modeled.

3,448,720_{GSF}

Is the total floor area Energy
Modeled for Active Projects
In 2019.

47.4%

Average Predicted
EUI Reduction for 2019
46% is the AIA pEUI avg.



Image of the rain water collection system at Hassalo on 8th. The project collects and treats 100% of wastewater on site for re-use.

GBD

50 LEED PROJECTS BY THE NUMBERS

GBD JUST CERTIFIED OUR 50TH LEED PROJECT. THE CUMULATIVE POSITIVE IMPACT OF THESE BUILDINGS IS ASTONISHING.

CARBON

445 THOUSAND ACRES OF FOREST PRESERVED

=



WATER

379 MILLION GALLONS OF WATER SAVED

=



ENERGY

\$108 MILLION IN ENERGY SAVED

=



CELEBRATE MILESTONES

The DDX serves as both an in-house tool and an industry wide open-source resource that firms can use to gauge progress.

PRACTICE, BEST PRACTICE.

NEXT STEPS + CONTINUED MOMENTUM

- Regularly review goals set with Sustainability Action Plan
- In depth project case study followed by deep analysis
- Educate clients and encourage/support staff certifications
- Engage Office in Sustainability Challenges
- Set a sustainability framework for each new project on Day 1
- Have office Sustainability Champion keep portfolio organized
- Conduct an office Sustainability P.O.E. or Waste Audit



THANK YOU. LET'S KEEP WORKING TOGETHER.

