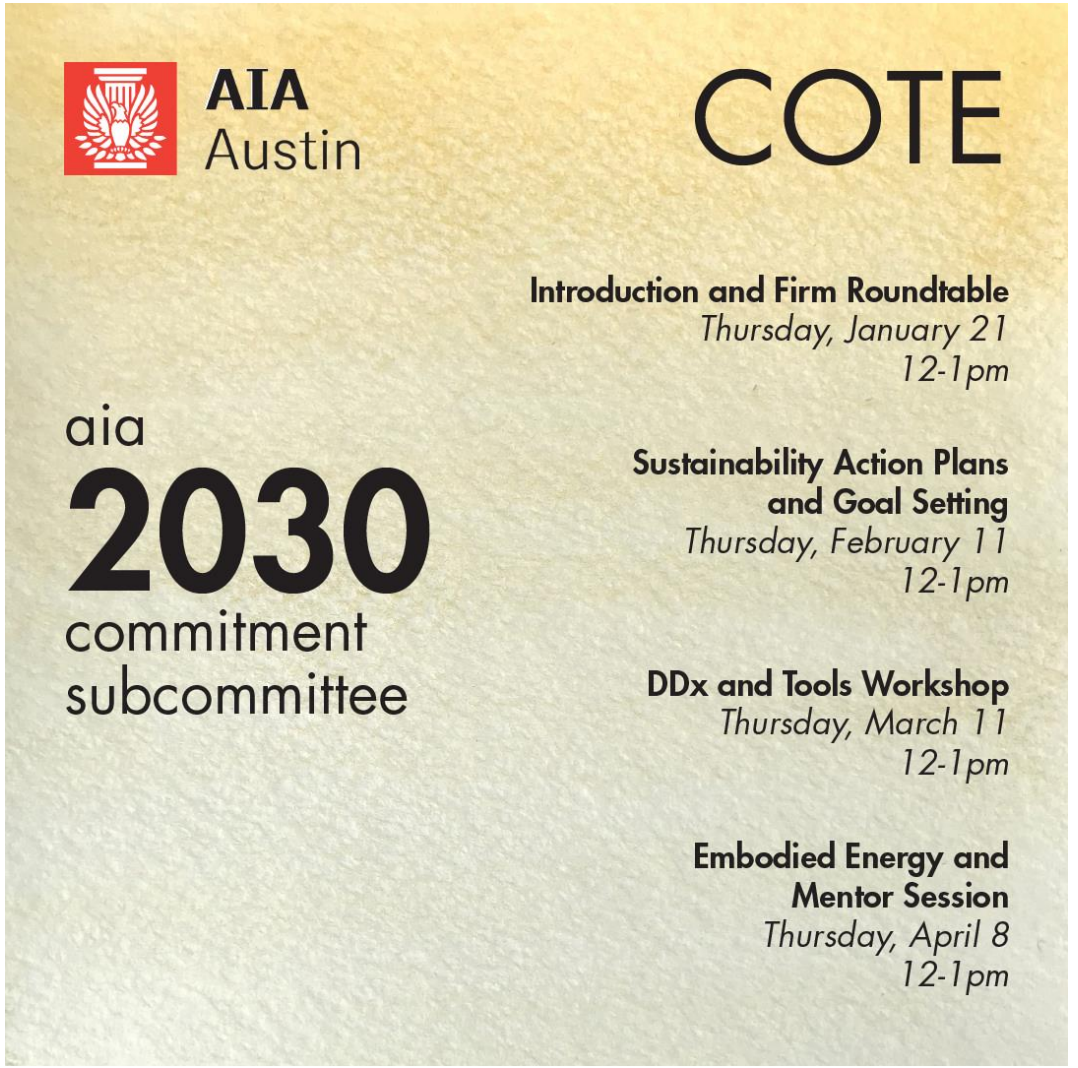
WELCOME!

Please write your questions in the chat.



AIA Austin COTE

2030 Commitment Subcommittee

Learning Objectives:

- Participants will be able to describe the interface and features of the Design Data Exchange (DDx).
- Participants will be able to use the DDx for reporting project performance.
- Participants will be able to define project performance goals using the DDx.
- Participants will be able to evaluate portfolio performance using the DDx.

The consequences of climate change are alarming, but they are not inevitable.

As professionals continue to coalesce around shared values and common goals, the opportunities for meeting the challenge expand. In 2019, AIA member overwhelmingly passed a resolution for “urgent and sustained climate action.”

The time to start is now!

2006 — **Architecture 2030 publishes the 2030 Challenge**

2009 — **AIA establishes the AIA 2030 Commitment**

2019 — **AIA Resolution on Climate Change passed at the AIA’s 2019 National Convention.**

Until zero-net carbon practice is the accepted standard of its members, the AIA will prioritize and support urgent climate action as a health, safety, and welfare issue, to exponentially accelerate the “decarbonization” of buildings, the building sector, and the built environment.

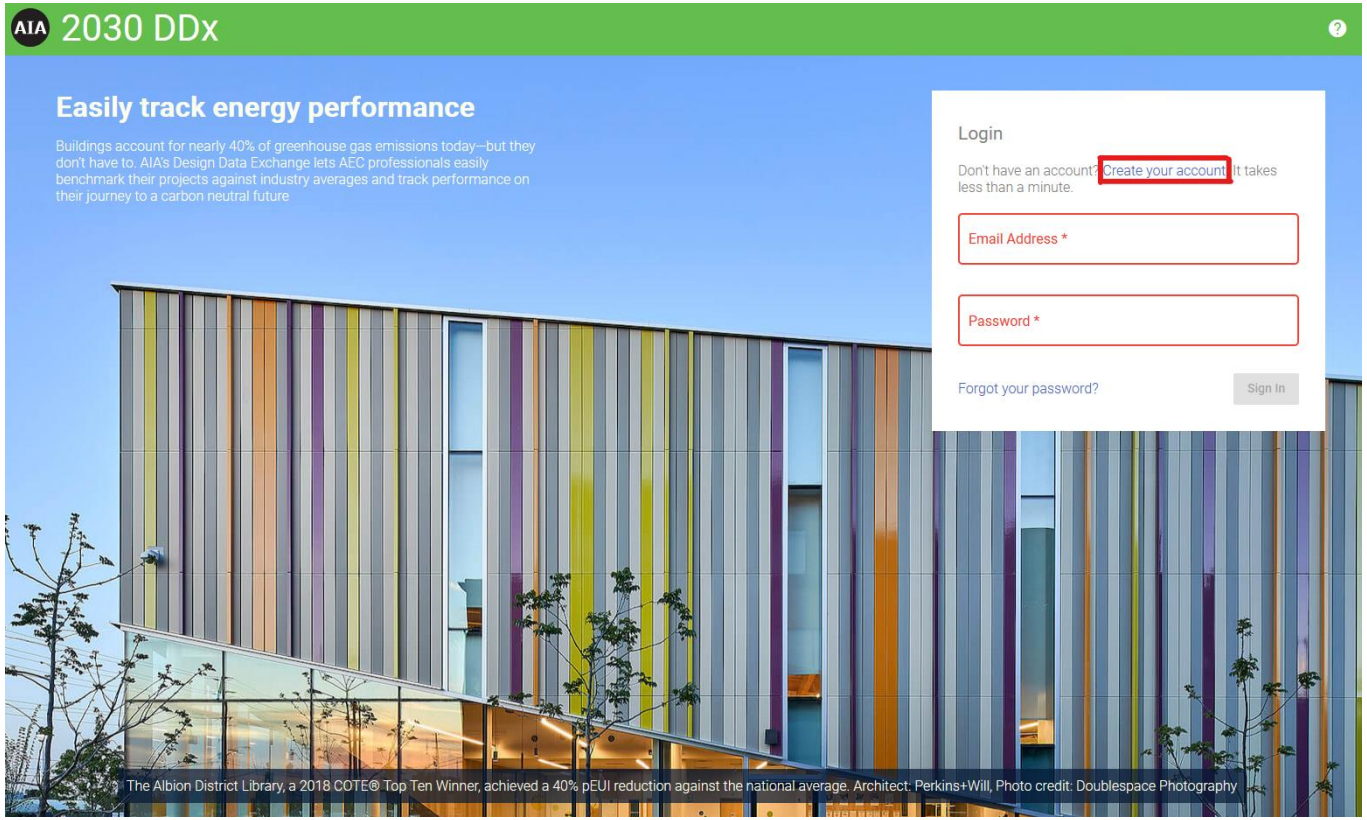
Joining the 2030 Commitment gives your firm access to the Design Data Exchange (DDx). https://2030ddx.aia.org/account/login

The DDx is used for submitting your:

- 2030 Commitment Letter
- Sustainability Action Plan
- Project Data

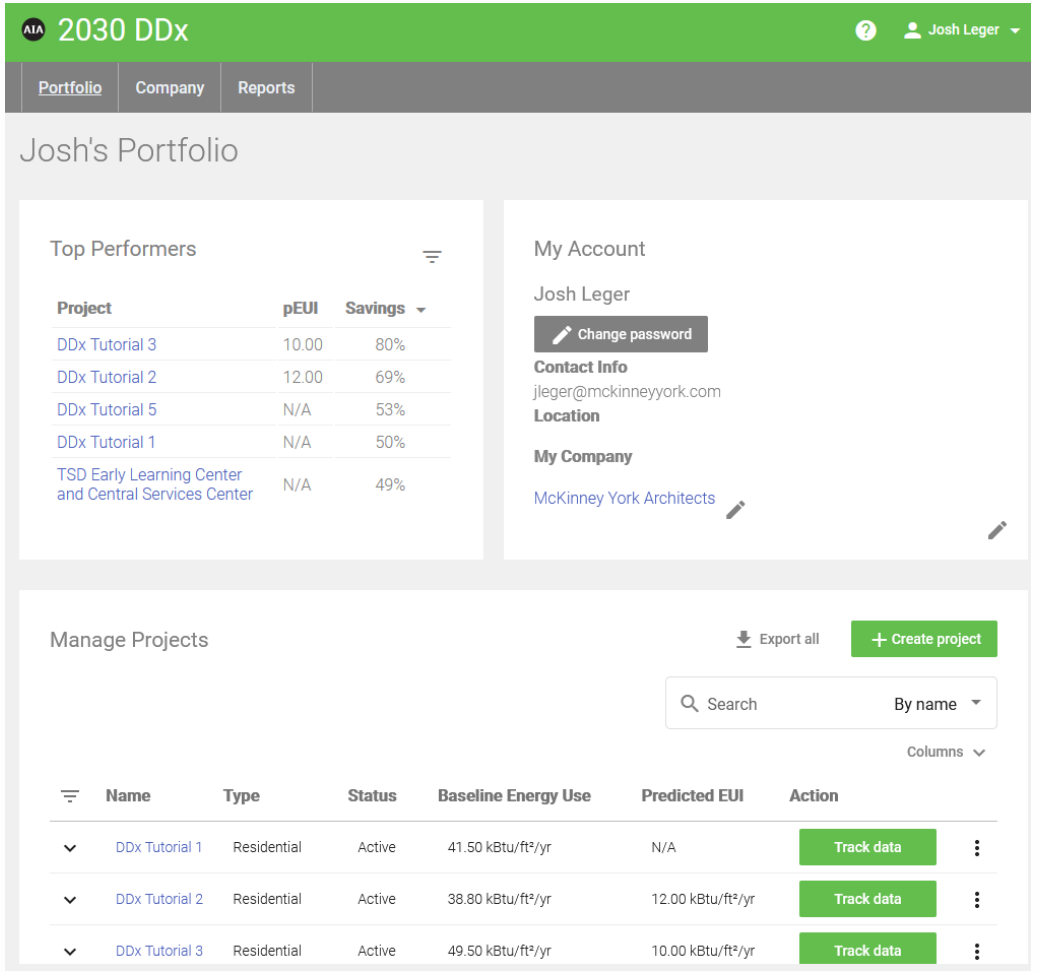
Multiple users can be added with various permission levels:

- Administrators
- Users
- Viewers

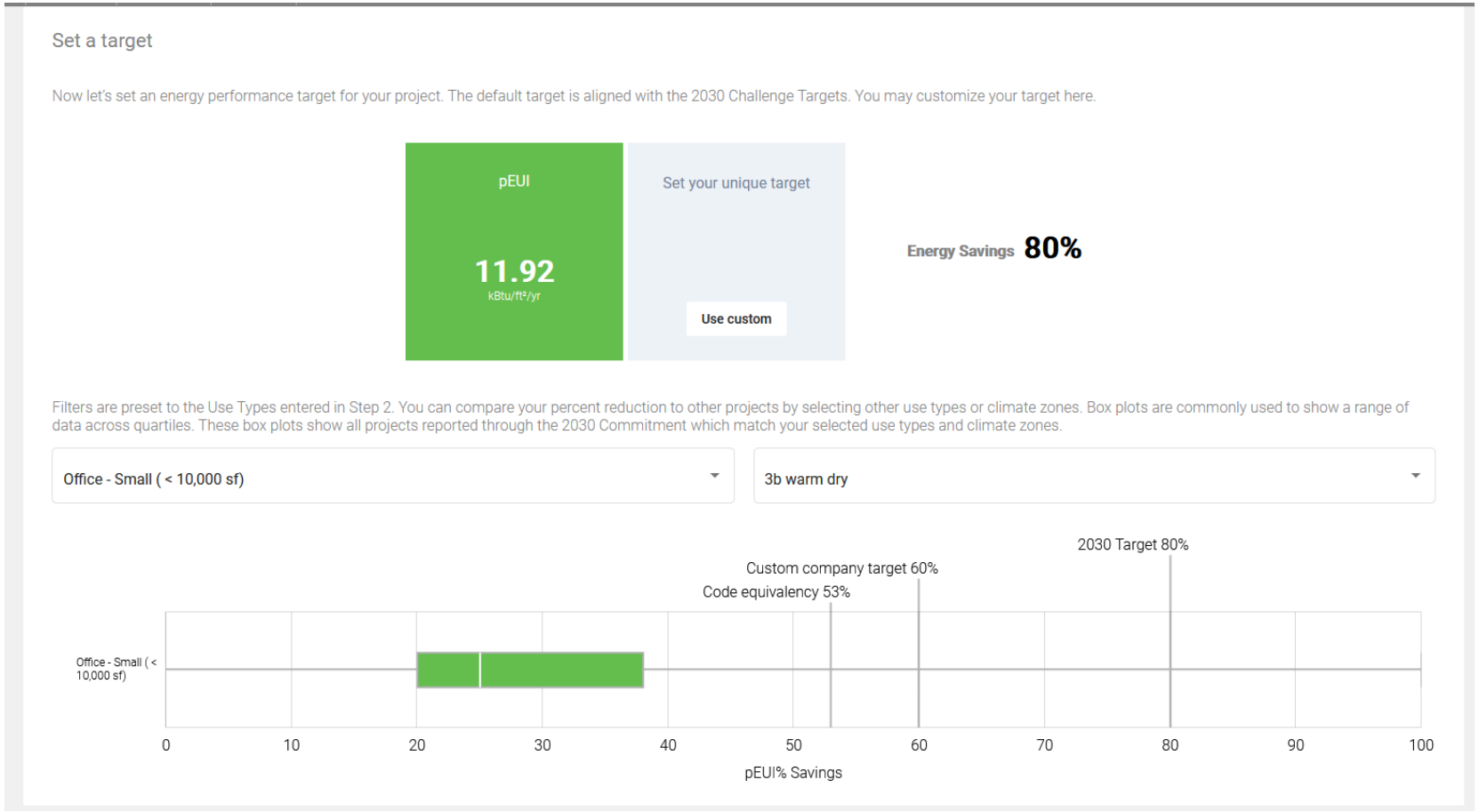


1 SIGN THE LETTER — 2 CREATE AN SAP — 3 ENDEAVOR TO MEET TARGETS — 4 REPORT PROJECTS — 5 UPDATE SAP

- **The annual reporting deadline is March 31st.**
- **Report all projects in an active design phase during the reporting year.**
- **In joint-venture projects, both firms may report the project.**
- **Only report interior projects with lighting scope.**



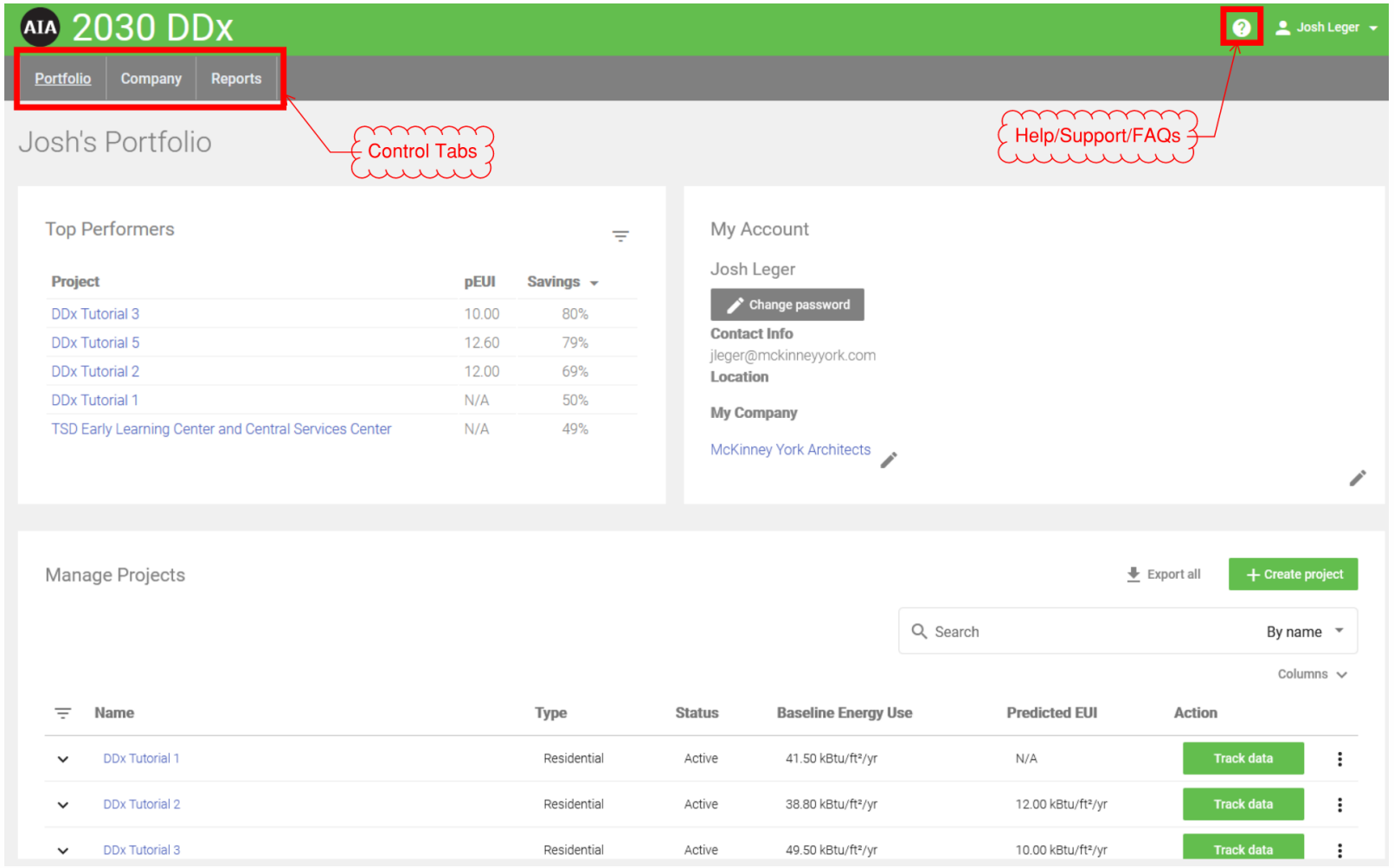
The Design Data Exchange (DDx) is a cloud-based, confidential reporting tool created by the AIA that allows your firm to compare project by type, size, climate, and other attributes across your firm's portfolio and the entire 2030 portfolio.



Navigating the DDx

Tabs and Help

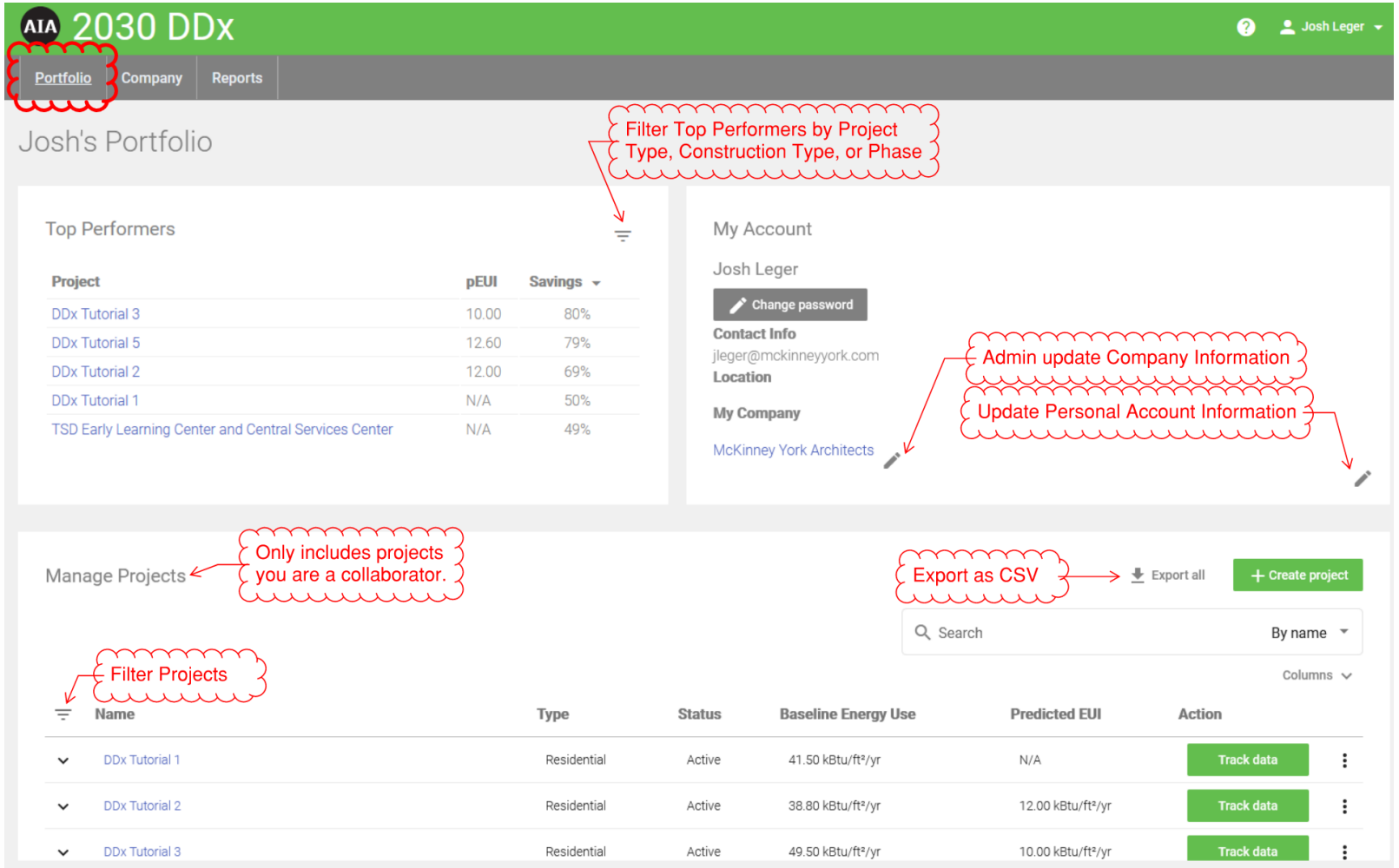
- Portfolio
- Company
- Reports



Navigating the DDx

Portfolio

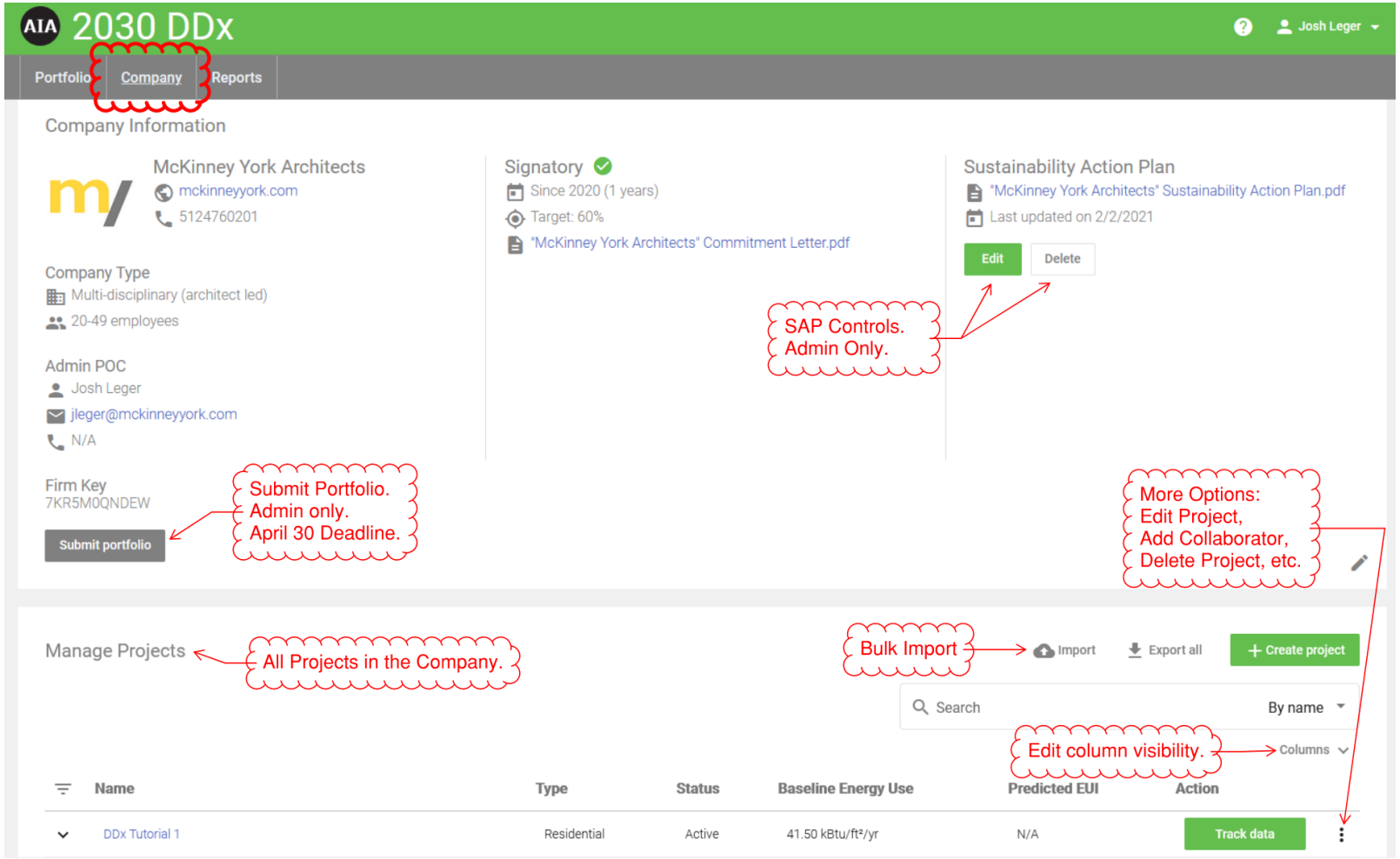
- Top Performers
- My Account
- Manage Projects
  - Project Dashboard
  - Export to CSV



Navigating the DDx

Company

- Company Information
  - Submit Portfolio (Admin)
- Sustainability Action Plan
  - Edit/Delete (Admin)
- Manage Projects
  - Add Collaborators
- Office/Studios (Admin)
- Employees (Admin)



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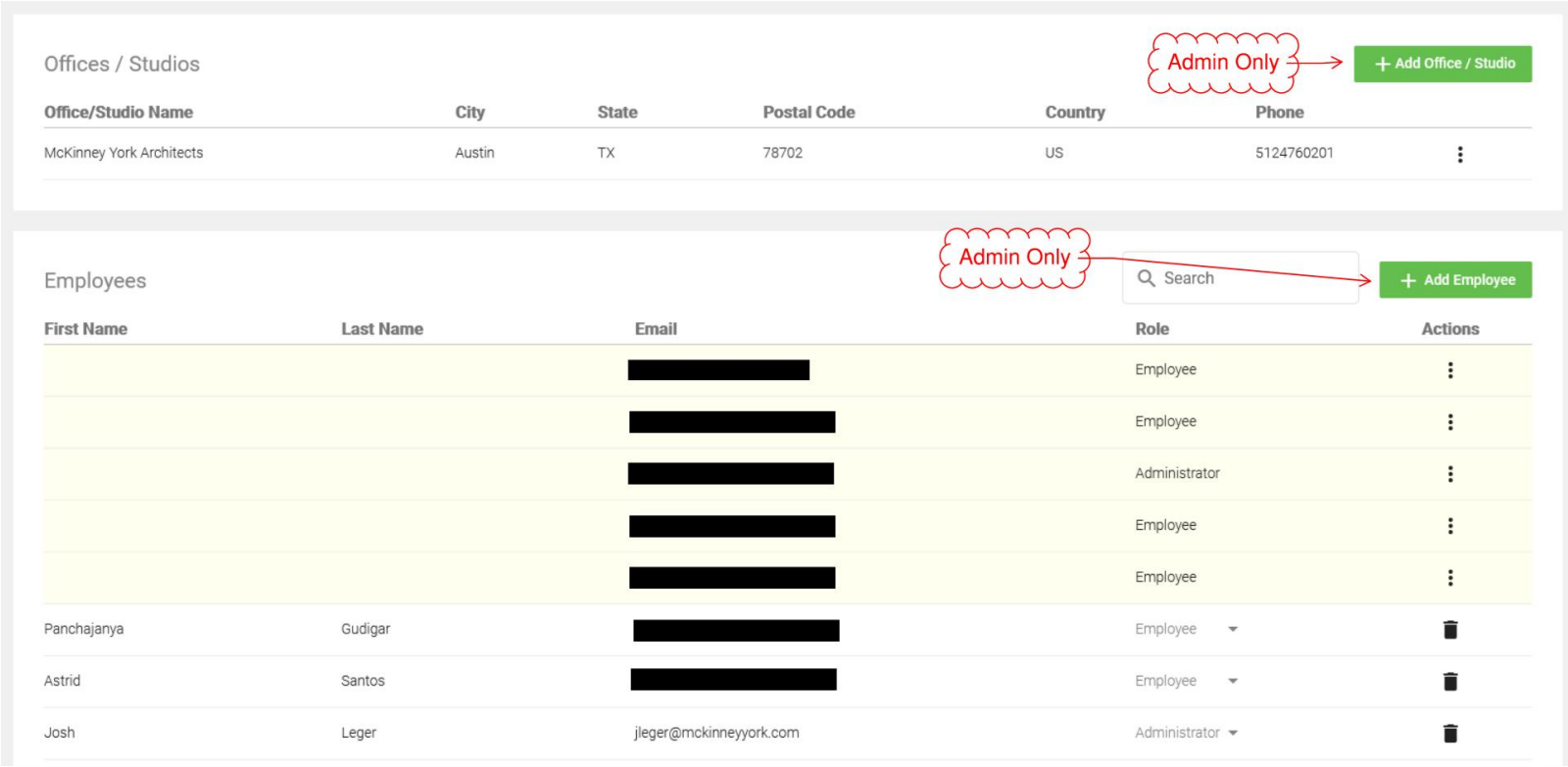
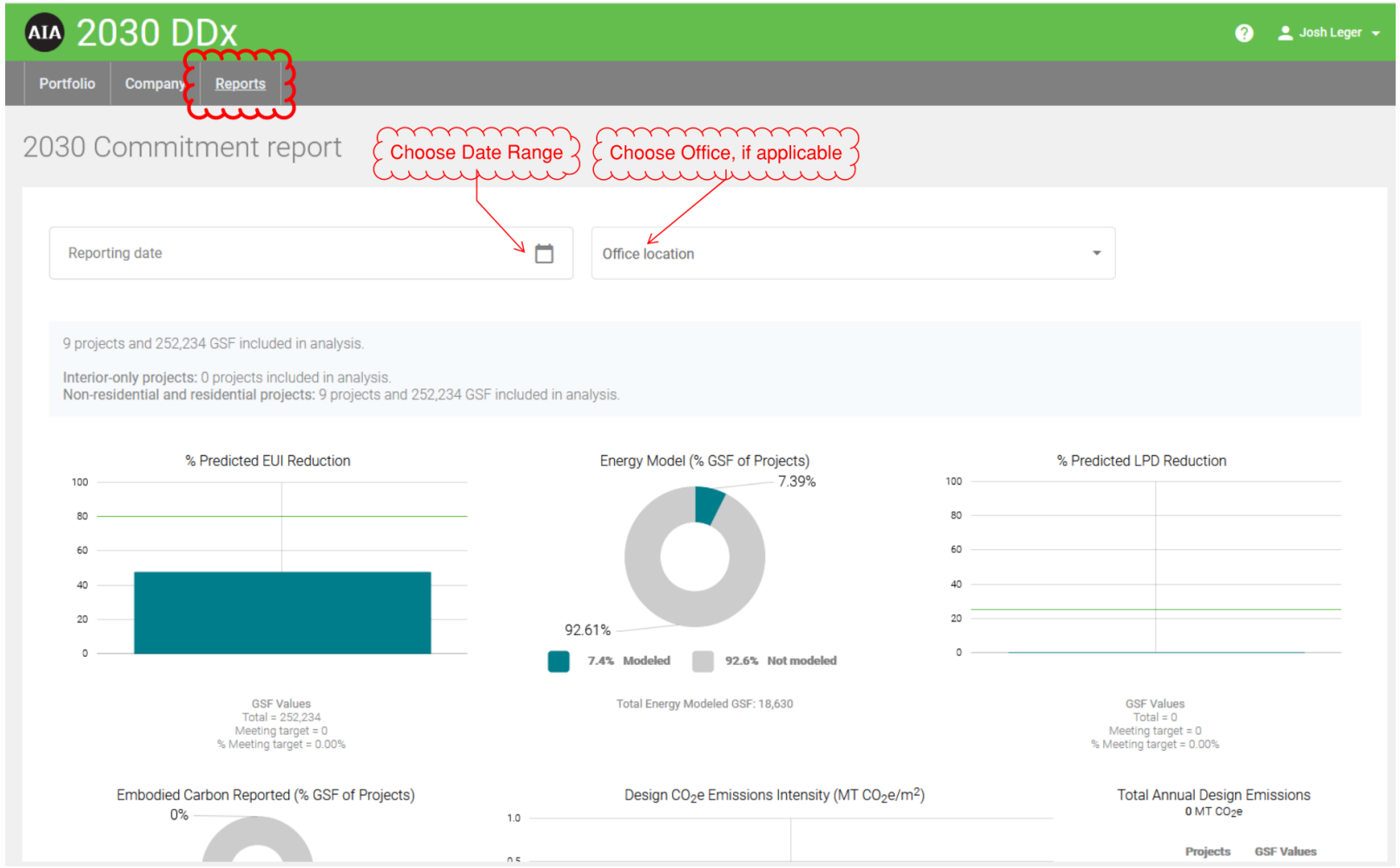


Navigating the DDx

Reports

- Filters
  - Date/Office
- Graphics
  - pEUI Reduction
  - Energy Model (gsf)
  - pLPD Reduction
  - Embodied Carbon
  - CO2 Emissions
  - Total Annual Emissions



Data Input

Direct Input

- Tutorial Today
- Great for smaller portfolios
- Higher Degree of Control
- Empower Project Teams.

Bulk Upload

- Import in-house database
- Inputs limited
- Quickly upload many projects

Energy Modeling Software

- Automatic upload from select energy modeling platforms
- Only applicable to firms that energy model regularly

Create Project

Portfolio or Company Tab

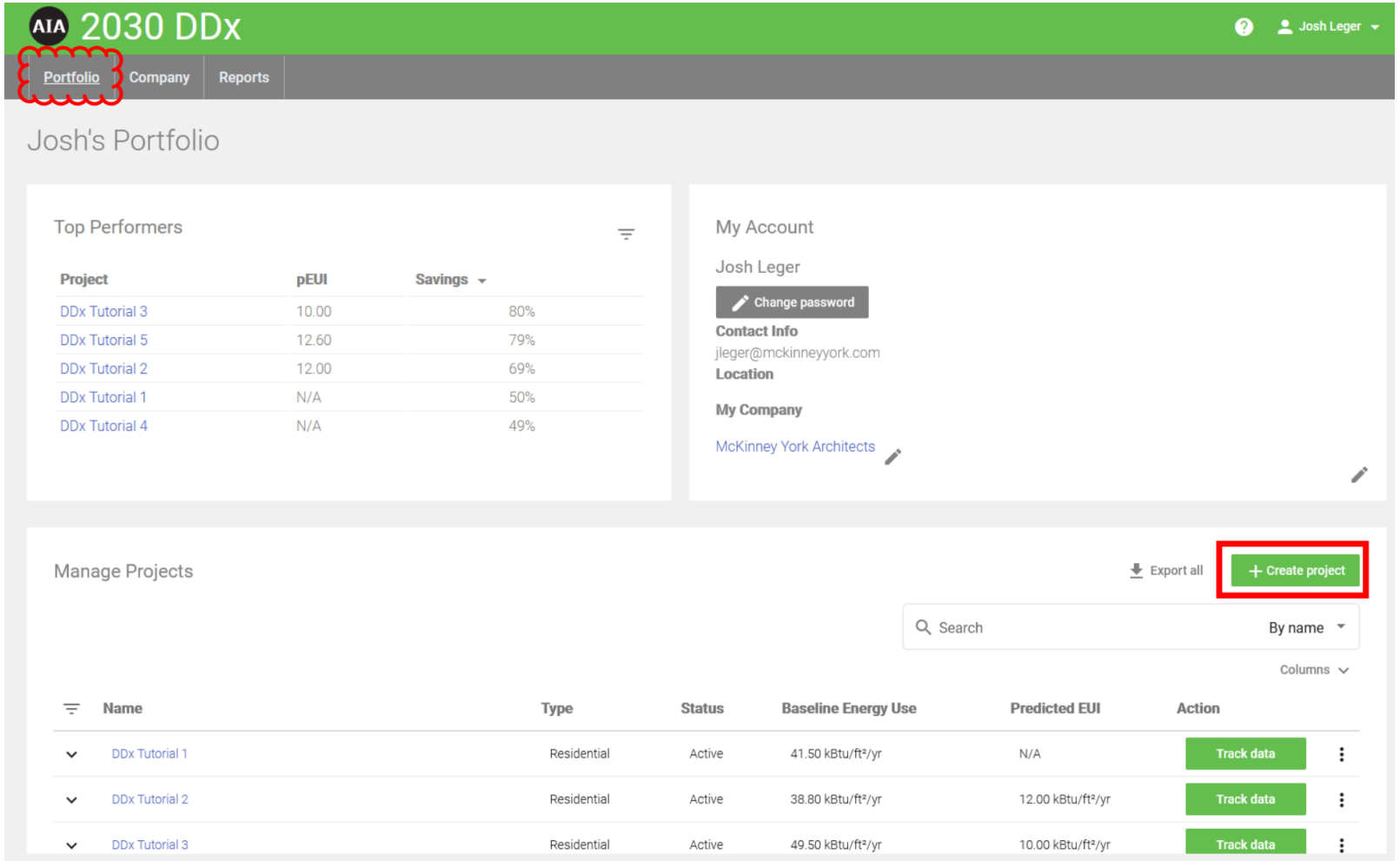
Step 1: Basic Information

Step 2: Extended Project Info

Step 3: Set EUI Targets

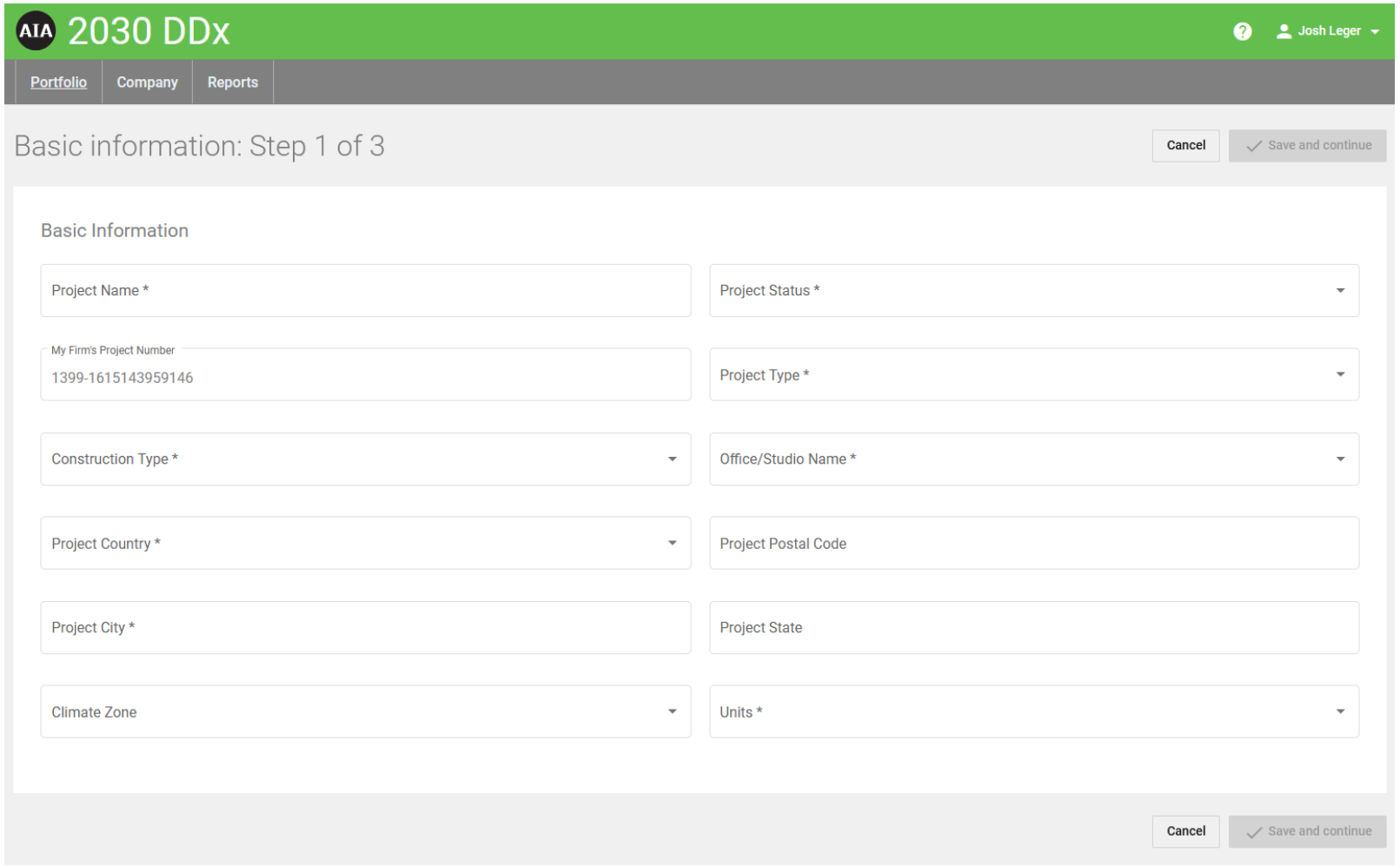
Step 4: Track Design Data

Step 8: Submit Portfolio



Input Basic Information

- Project Name
- Project Status
- Project Number (not required)
- Project Type
- Construction Type
- Office/Studio
- Project Country
- Postal Code
  - Linked to Climate Zone
- Project City
- Project State
- Units (IP or SI)



Project Type

Residential or Non-Residential

- Predicted Energy Use Intensity (pEUI) is used for project performance
- The 2030 Commitment uses the 2003 CBECS database to define the baseline for each use type.
- For IP, pEUI is measured as kBTU/sf/yr.

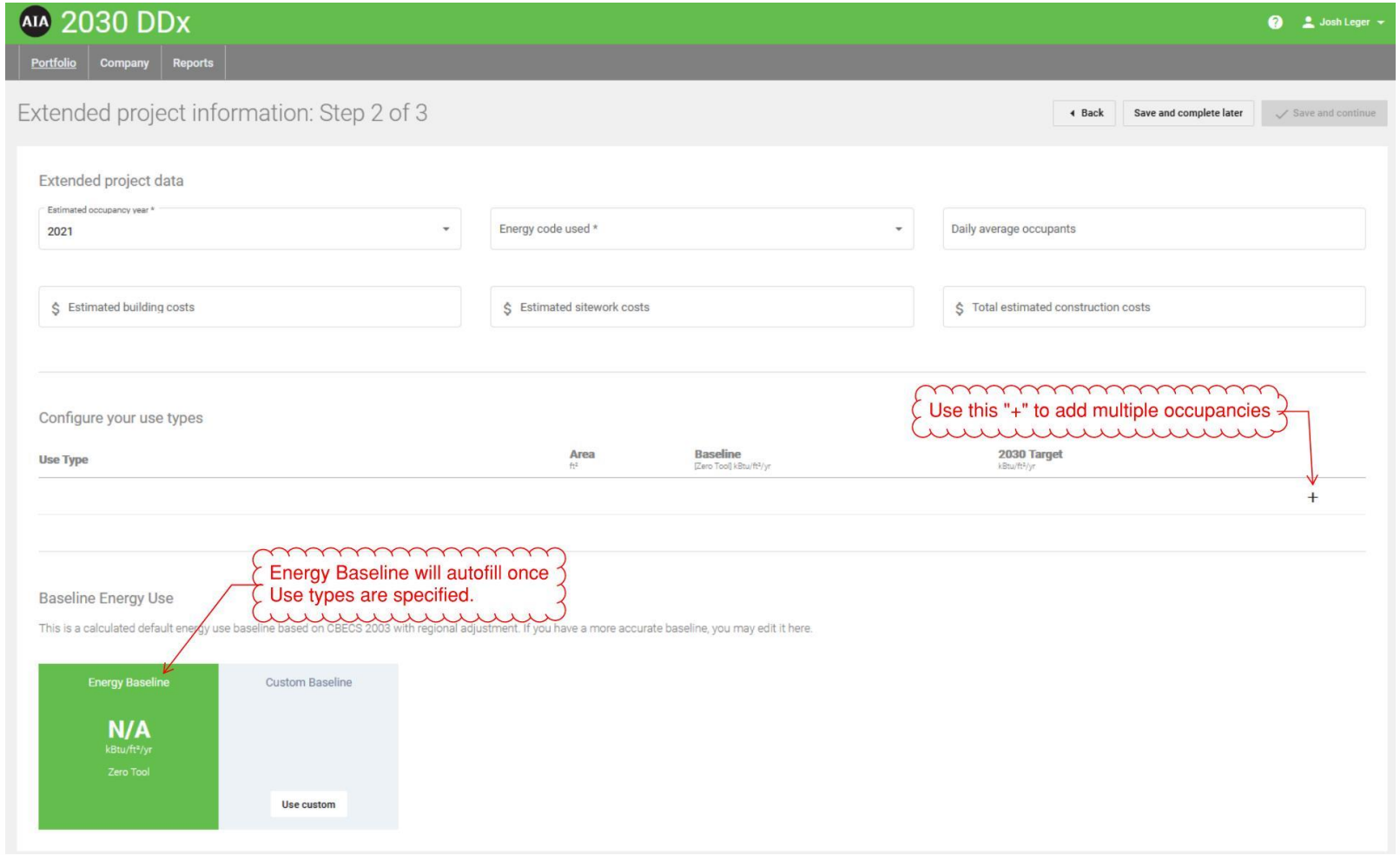
Interiors Only

- Predicated Lighting Power Density (pLPD) is used for project performance.
- The 2030 Commitment uses ASHRAE 90.1 2007 as the pLPD baseline for each use type.
- pLPD is measured in watts/sf.

Input Extended Project Info

- Estimated Occupancy Year
- Energy Code
- Use Types
  - Use the “+” to add multiple uses.
- Optional
  - Daily Occupants
  - Building Costs
  - Sitework Costs
  - Total Construction Costs

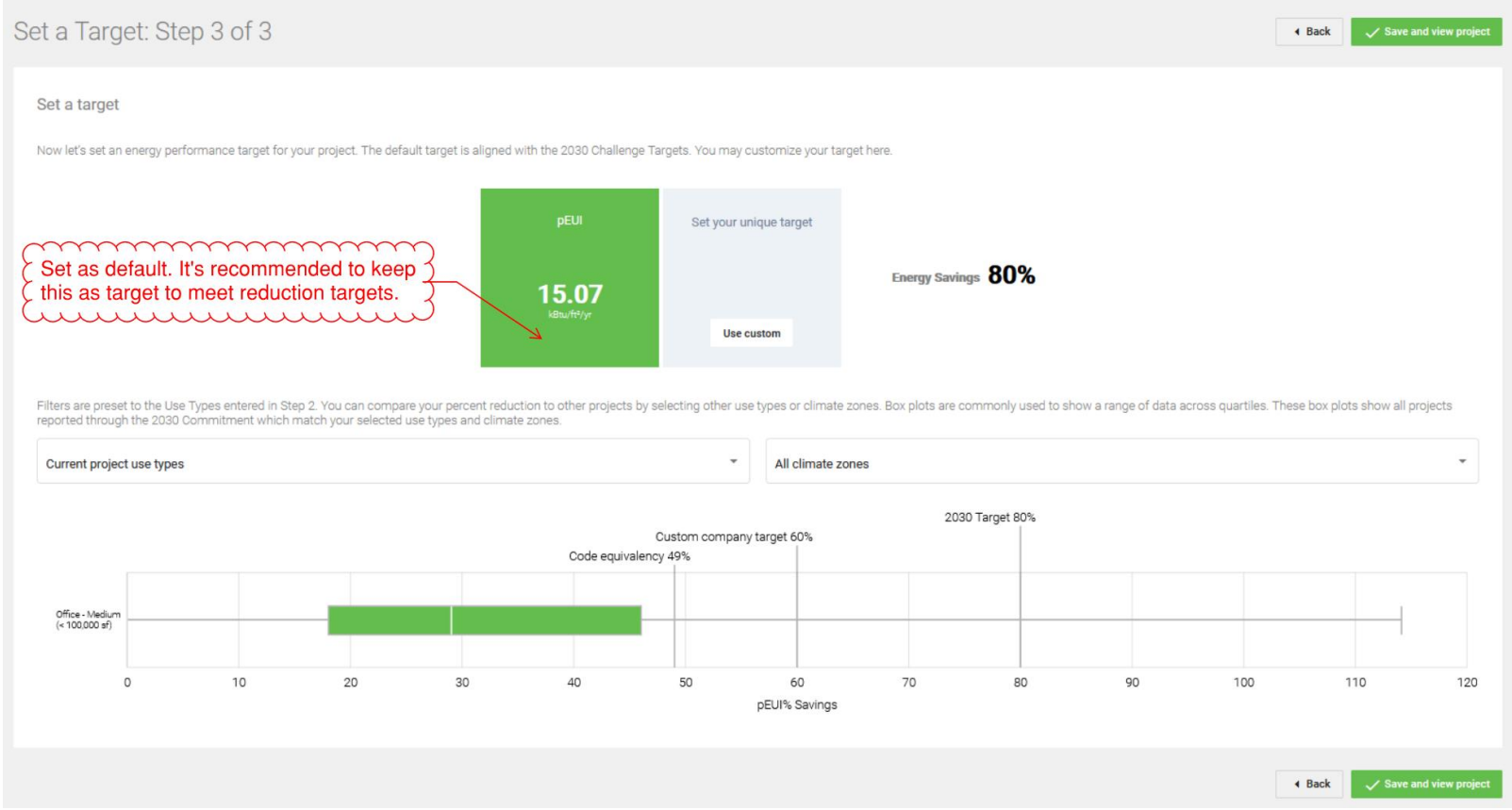
- Depending on how sophisticated your firm is you can use the CBECS baseline or your own.



Set a Target

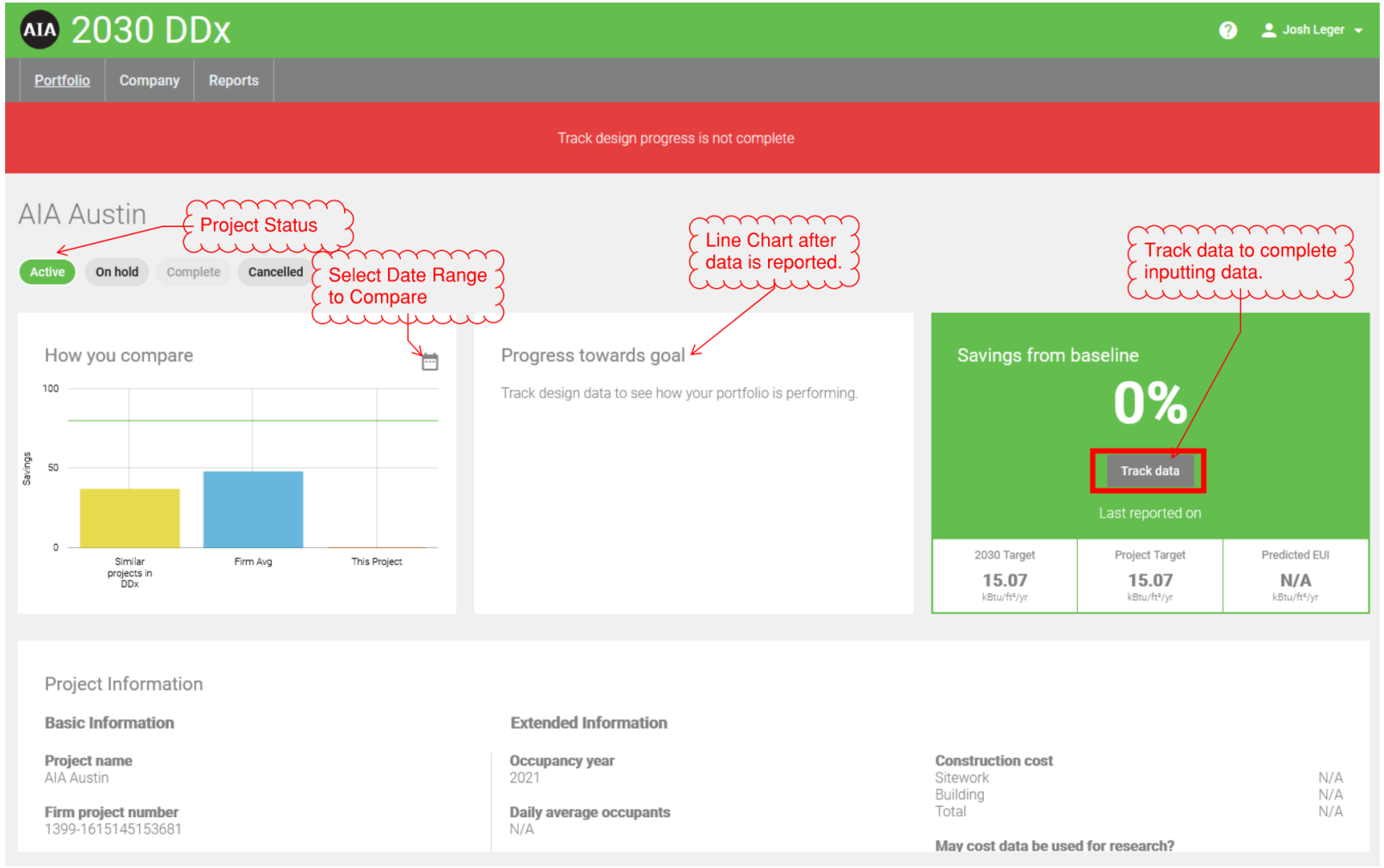
- **Goal**
  - Use Default Target (80%)
  - Use Custom (% Updates)
- **Compare**
  - Filter by use types and/or climate zones
  - Box and whiskers chart shows what other signatories have been reporting.

Note: If you hit “back” you will lose any project data previously entered. This is true of the interface in general.



Project Dashboard

- Project Status
- How you Compare
- Progress towards Goal
- Savings From Baseline
- Project Information
- Project Use Types
- Target
- Design Phase Data
- Collaborators
- Project Notes



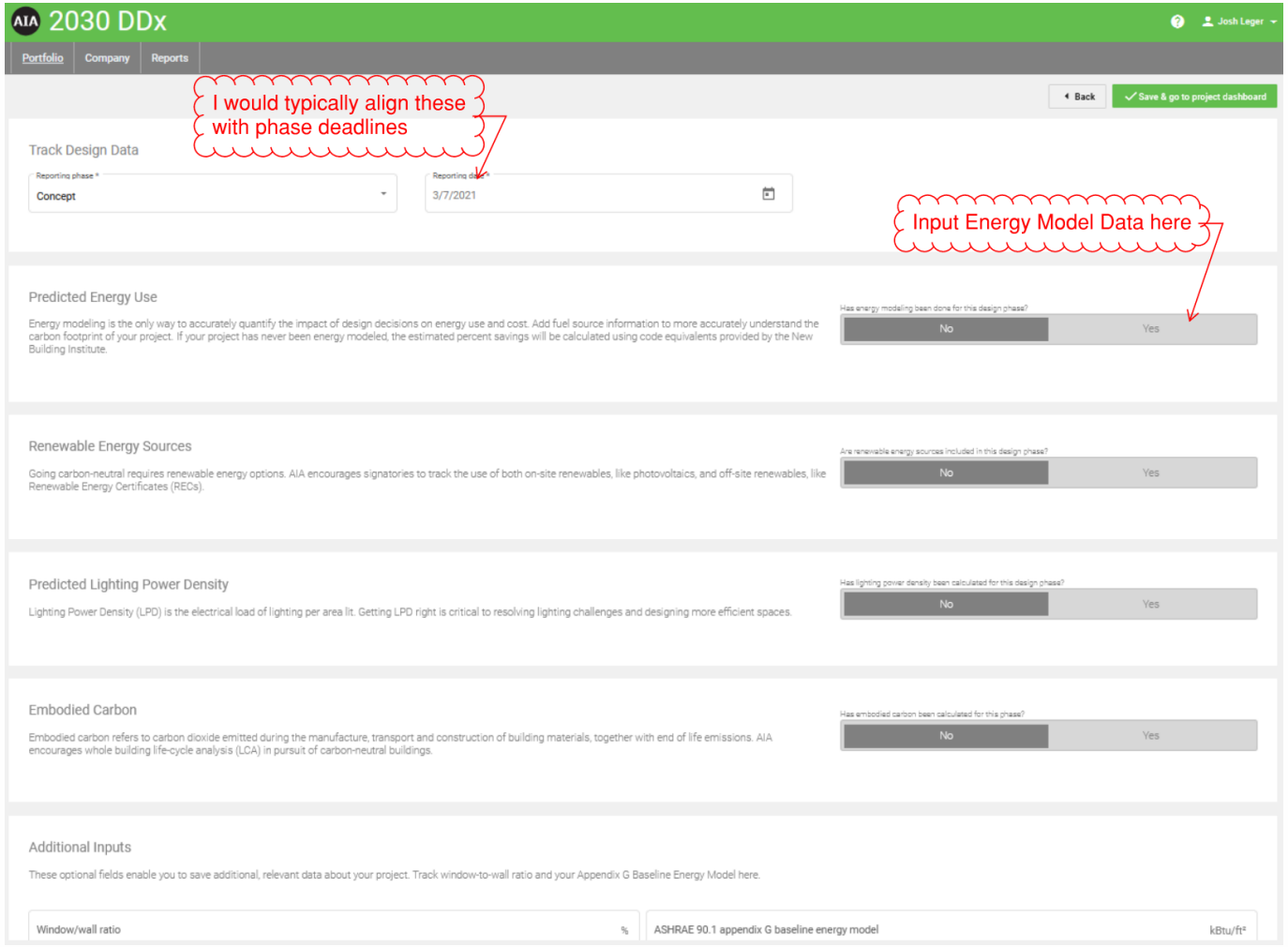
Track Design Data

By Code Compliance only needs

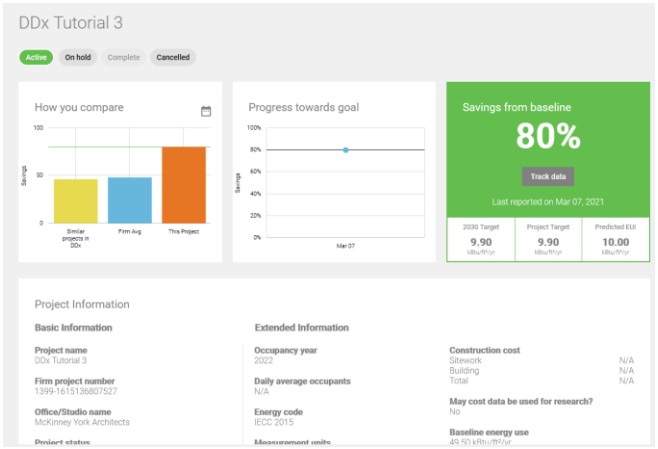
- Reporting Phase
- Reporting Date

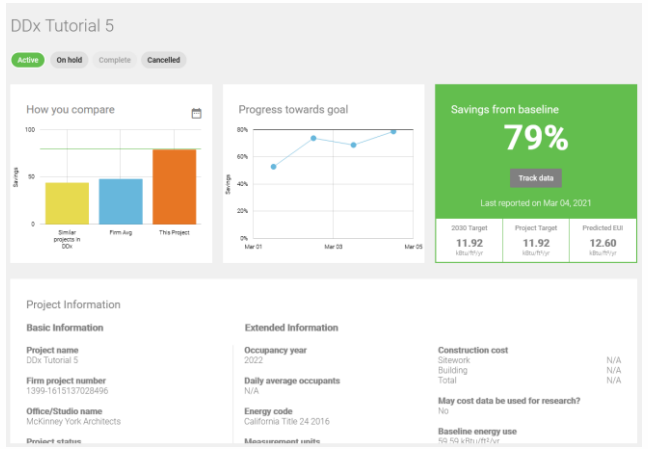
Optional Inputs

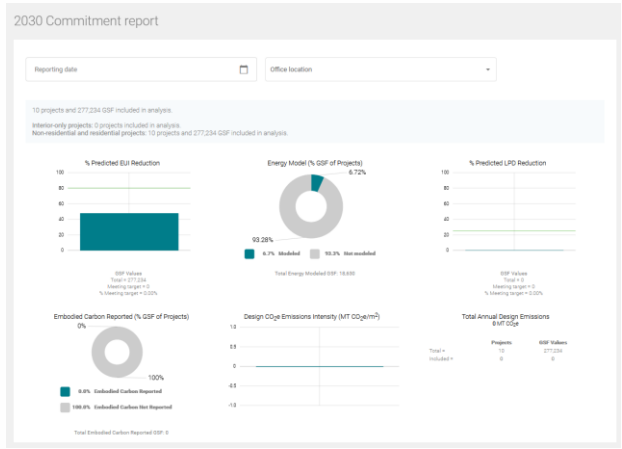
- Predicted Energy Use
  - Energy Model and Info
- Renewable Energy
  - Onsite
  - Offsite
- Embodied Carbon
- Additional Inputs
  - Window Wall Ratio
  - Appendix G Baseline Model



Process







Create Projects → Input Data → Track Progress → Submit Annually

Communication

Report to Project Teams

- Have regular check-ins with sustainability champions to keep project on track
- Share lessons learned and modeling best practices for similar projects

Report to Firm

- Reporting for 2030 Commitment
- Check progress against Sustainability Action Plan
- Investigate why projects are under-performing
- Fail Forward
- Celebrate

Marketing

- Website
- Social Media
- Email Blasts
- Proposals and RFQs

Energy Modeling Tools

- 30 AEDG AERG
- 50 AEDG AERG
- Autodesk Insight*
- Climate Studio*
- Cove.Tool*
- DOE 2.2
- DOE 2.1E Energy Pro
- DOE 2.1E VisualDOE
- DOE 2.2 Green Building Studio
- DOE 2.2 eQuest
- Energy Plus
- Ladybug
- HAP HEED
- Home Energy Saver
- IES – Virtual Environment*
- NEO Net Energy Optimizer*
- PlanITImpact*
- REM Rate
- Sefaira*
- Trace 700
- TRNSYS

*Direct input through API.

Resources

AIA National

AIA 2030 Commitment by the Numbers

AIA 2030 Firm Directory

Graphics

Data Viz Project

Project Stasio

Visual Display of Quantitative Information

Questions?