

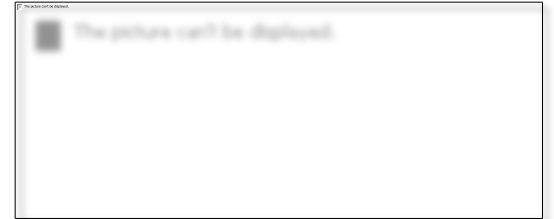
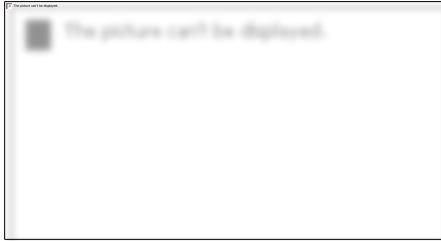
# BuildZero.Org - Background

- Team
- History: Zero Energy Building Design and Energy Modeling
- Vision
- Challenges
- Mission: Digital Infrastructure = Cloud Software Platform
  
- Software prototype demo
- Questions

# High Performance Buildings

- Passive House Design / Build
- Zero Energy Design / Build

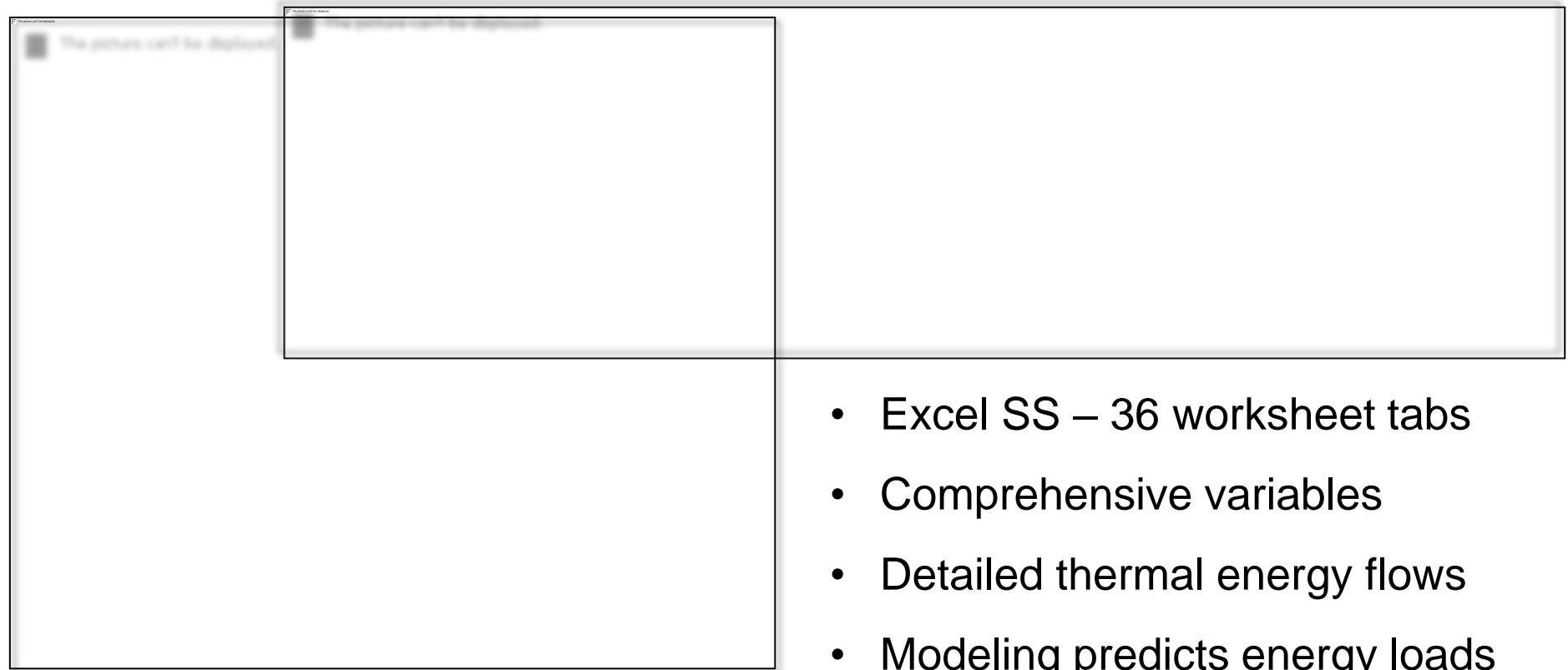
## Silicon Valley



- **Research**
- **Innovation**



# PH Tools: PHPP Energy Modeling

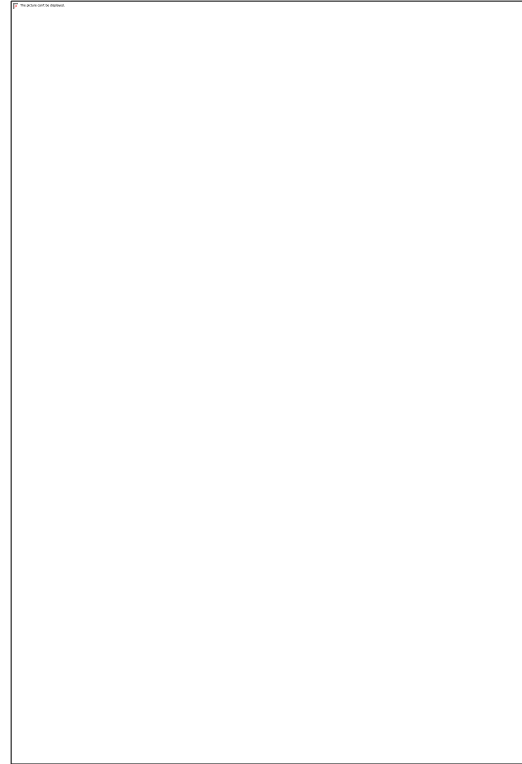


- Excel SS – 36 worksheet tabs
- Comprehensive variables
- Detailed thermal energy flows
- Modeling predicts energy loads
- Solves EB Equation

# PH Tools: PHPP Energy Modeling



Worksheets



# PH Tools: PHPP Energy Modeling

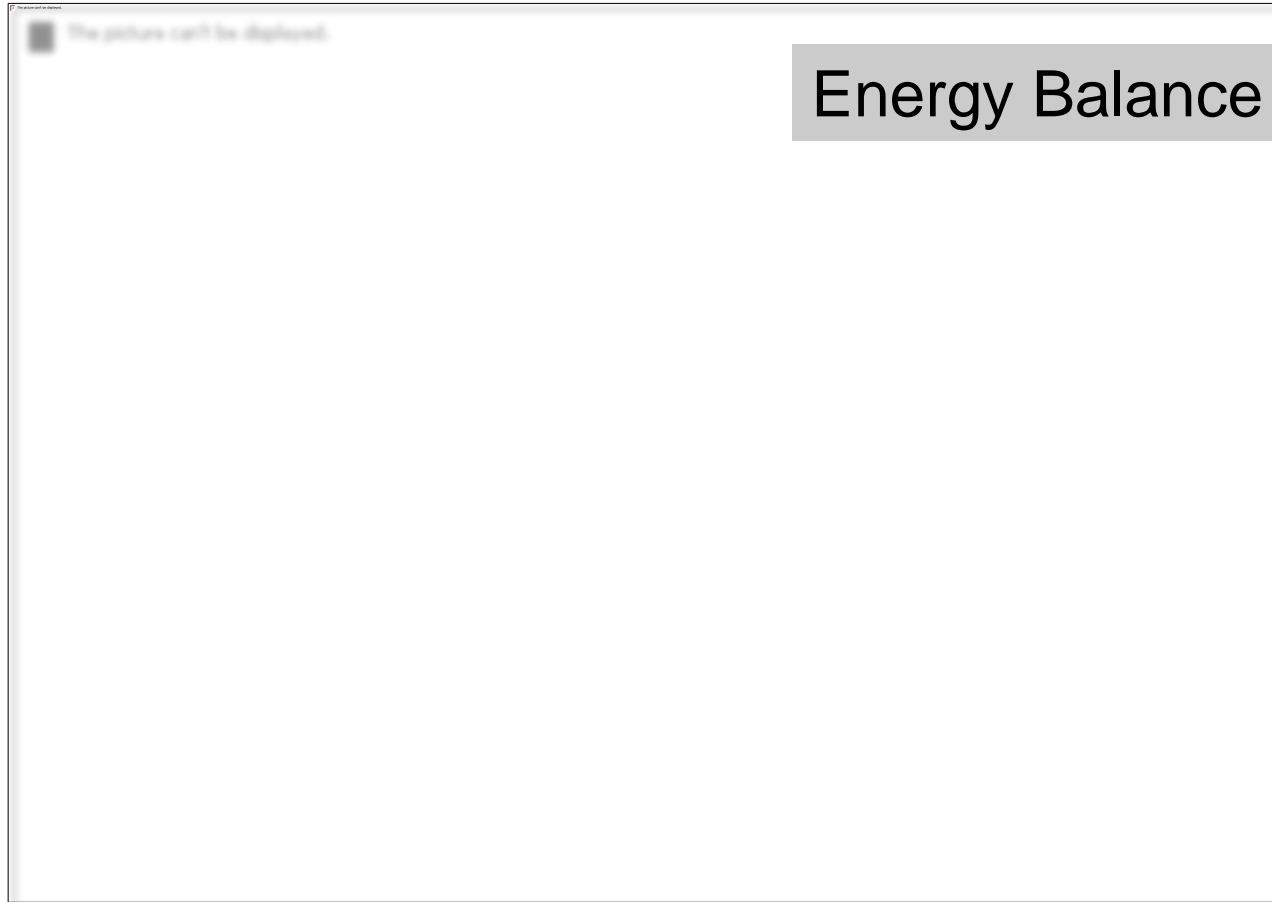


# PH Tools: PHPP Energy Modeling

Monthly  
Heating  
Demand

Verification  
Metrics

# PH Tools: PHPP Energy Modeling



Energy Balance Graphs











# Barriers to Climate Action Policy Implementation

## 1. Inertia of existing building culture

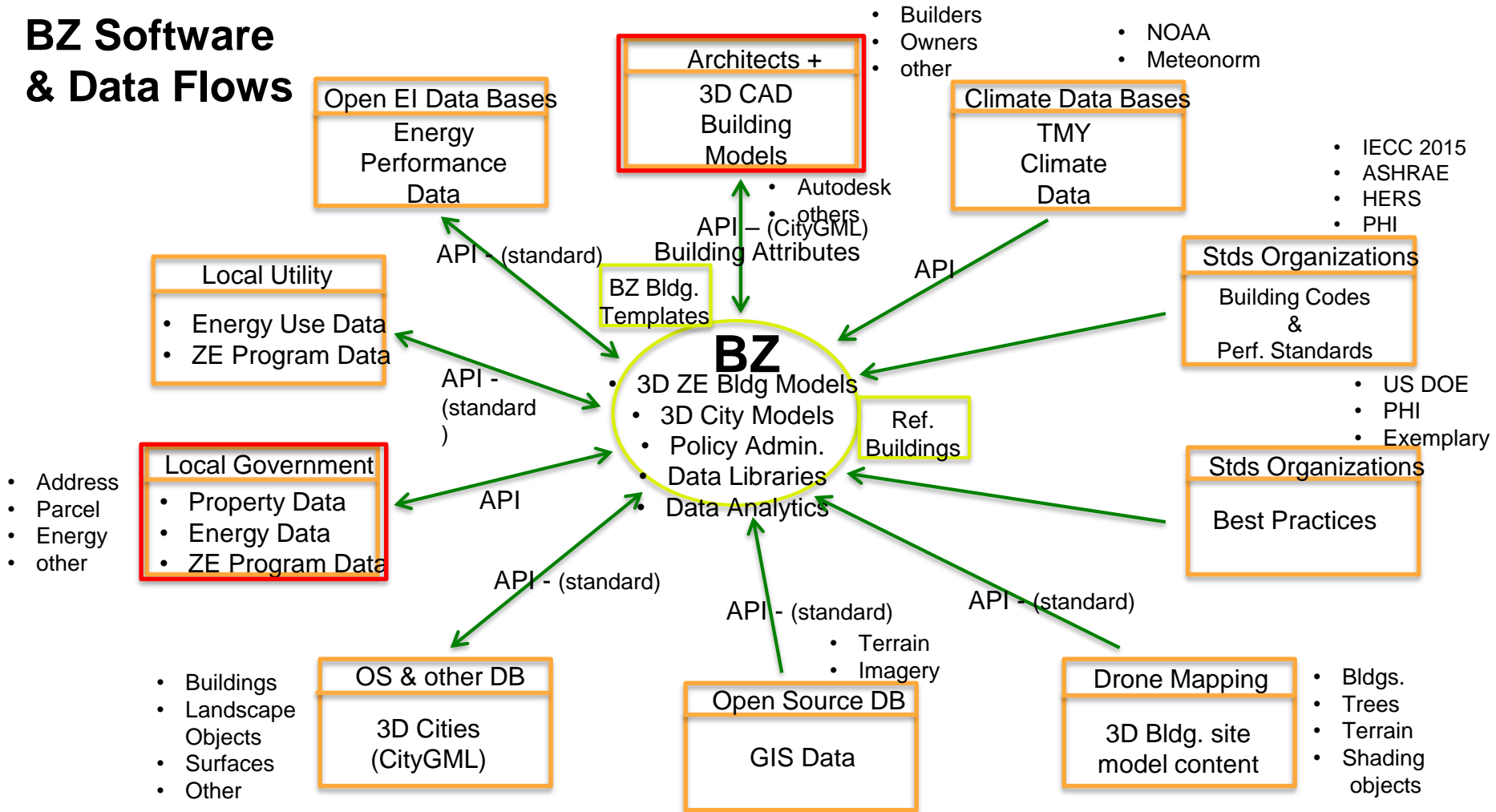
### Lack of:

2. Knowledge and Design Skills (Software/AI)
3. Policy Implementation Logistics (Software)
4. Decision Support Tools (Analytics Software)
5. Community Engagement (Software)





# BZ Software & Data Flows



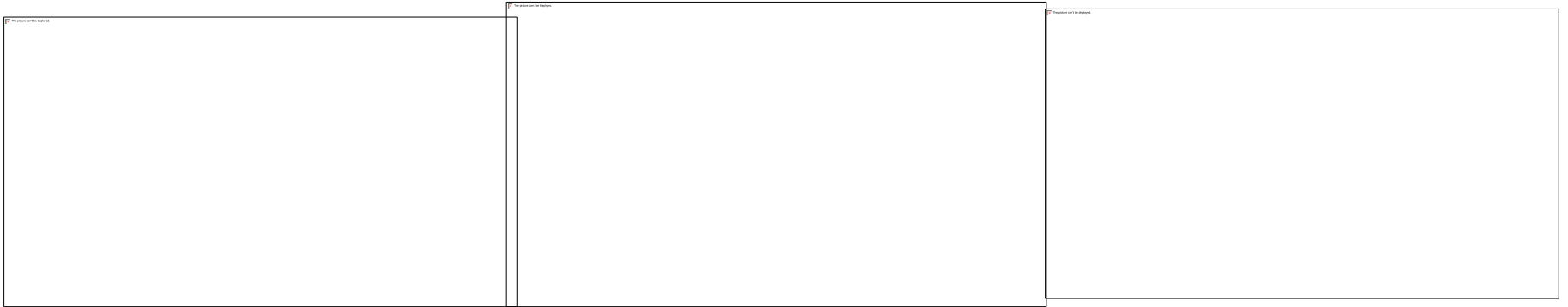


# BuildZero Platform – Open International Standards: Inter-operability for software and data sharing

Area	Standards
Energy Calculations	EN ISO 52000 (EPB compliant) (formerly ISO 13789/90 etc.)
Energy Model Validation	IEA & NREL “BESTtest” (ASHRAE Std 140)
GIS Data	OGC (Open Geospatial Consortium)- GML3 & others
BZ Buildings Data Model	CityGML + Energy ADE
Open Source Software	JavaScript libraries, GIS, 3D data, BZ core, etc. ...
Open Source Data	GIS (e.g. Open Street Maps), imagery, terrain, cadaster, lidar, etc.



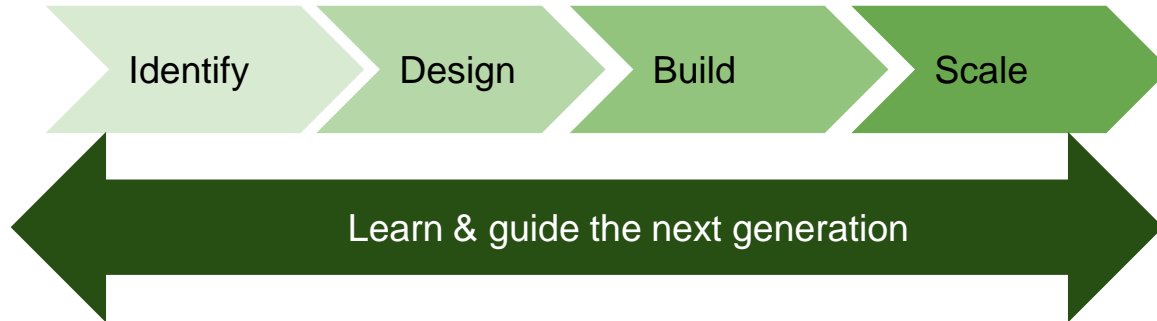
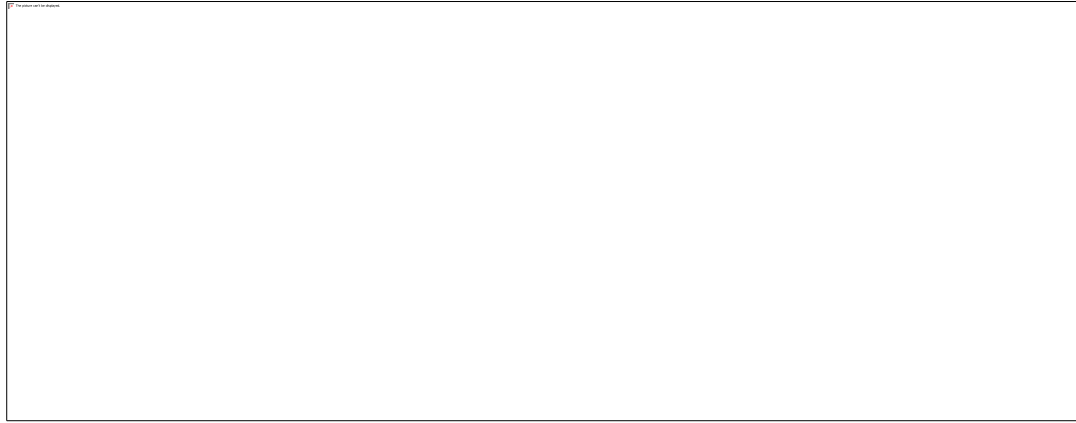
# **BuildZero transforms our ability to mitigate climate change.**



... an open access digital platform that powers Zero Energy, Zero Carbon policy implementation.

- **BuildZero Technology Stack**
- **Building Energy Designer demo**

# Through access to interactive data you can navigate the path to creating our zero energy future



# Build Zero: The Social Enterprise Model

- Drive usage to achieve adoption
- Introduce transaction fees to enable revenue source to fund platform growth
- Secure sponsorship
- Add premium user capabilities
- Offer brand advertising for energy conscious companies with aligned purpose

# How You Can Help Build a Movement

## Opportunities

- **Test**
- **Invest**
- **Request**

