

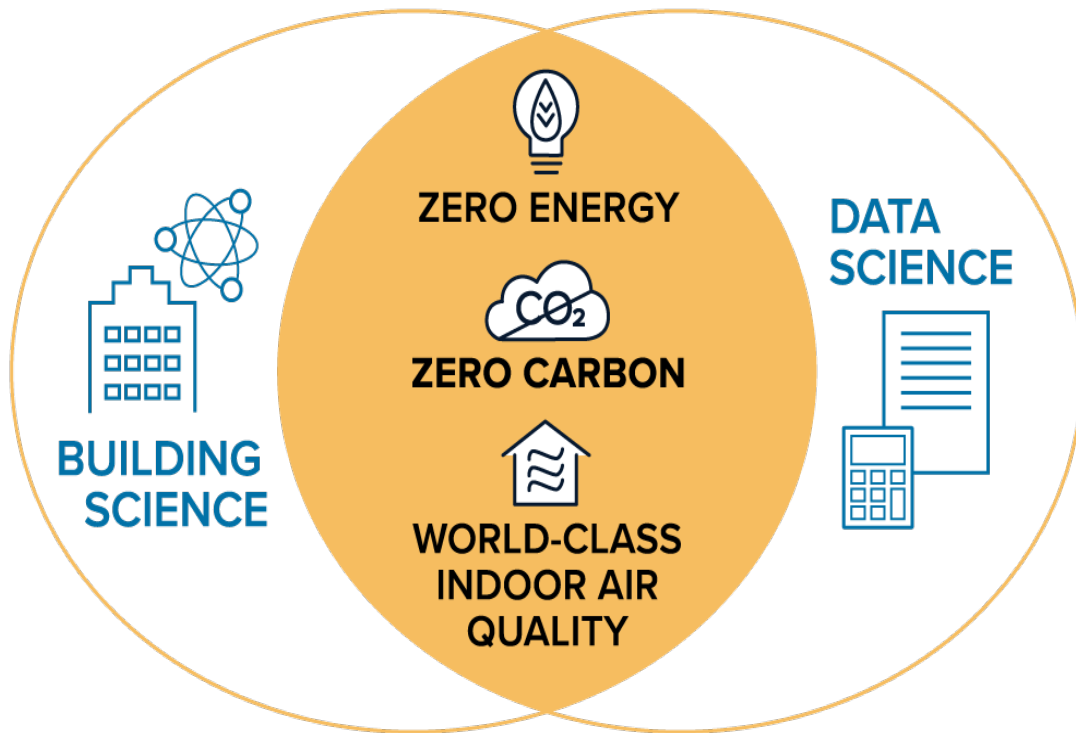
Haystack in Sustainability and ESG

Adam Wallen, Ziva Tech Solutions and
Craig Stevenson, AUROS Group



PROJECT HAYSTACK ENABLING ZERO CARBON ...

... the intersection of building science and data science





CASE STUDY: Zero Energy, Smart Building Development

Over 1 million square foot development

“One Developer Takes
a Bite Out of Carbon
and Can Prove It.”

The Gate, Frisco, Texas





CASE STUDY: Using a Decarbonized High School to Teach Future Citizens

Over 60 thousand square foot development

“The Environmental Charter School Puts its Mission into Practice.”

ECS, Pittsburgh, Pennsylvania





CASE STUDY: Zero Carbon, Zero Waste Factory

Over 450 thousand square foot development

“A New Factory
Demonstrating
Performance.”

Blueprint, Windsor, Connecticut





The Opportunity is Game-Changing

“When you combine Haystack tagging with the power of Physics-based simulations, you can easily compare where you are with where you want to be in a variety of ways.”

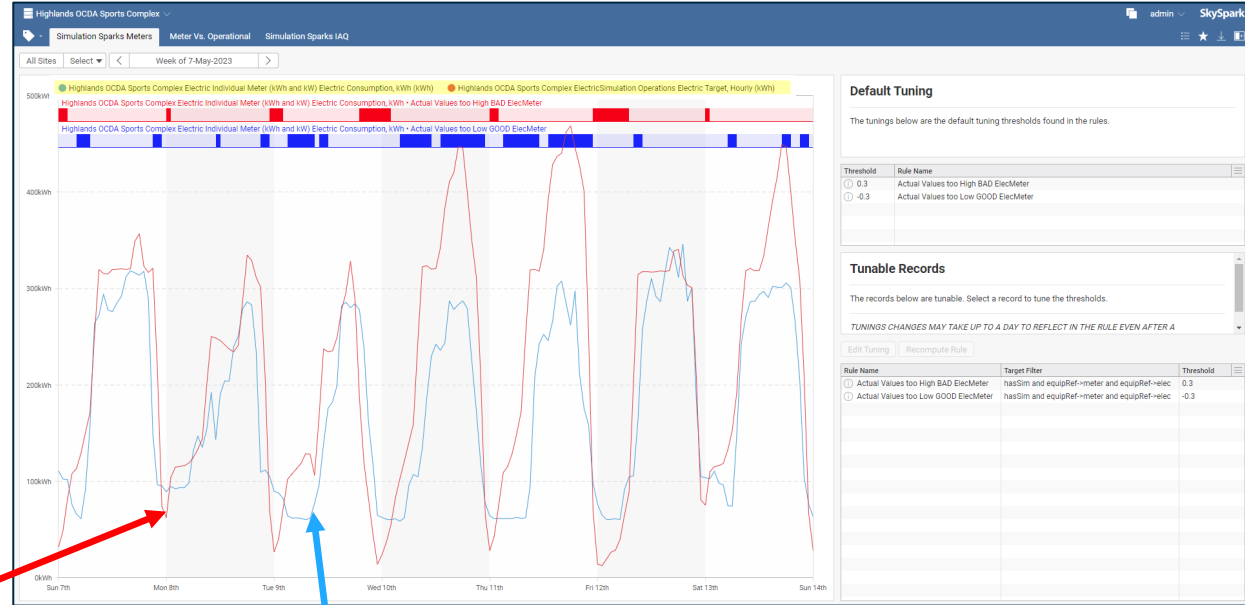
Adam Wallen, Ziva Tech Solutions

FAULT DETECTION & DIAGNOSTICS



Integrated Simulation

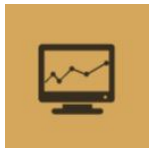
Physics-based modeling and simulation provides innovative context



Simulated Performance Actual Performance

Building Owners want to know:
“Did I get what I paid for?”

MONITORING-BASED COMMISSIONING



Integrated Simulation

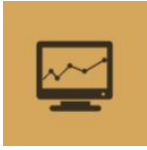
Physics-based modeling and simulation provides innovative context



Simulated Performance

Actual Performance

Facilities Managers want to know:
“How is my building supposed to perform?”



CASE STUDY: Ohio County Development Authority, Highlands Sports Complex

Over 150 thousand square foot development

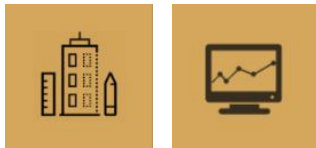
Project Demonstration

<https://skyspark.auros360.com:7443>

Username: Haystack

Password: ZivaAuros

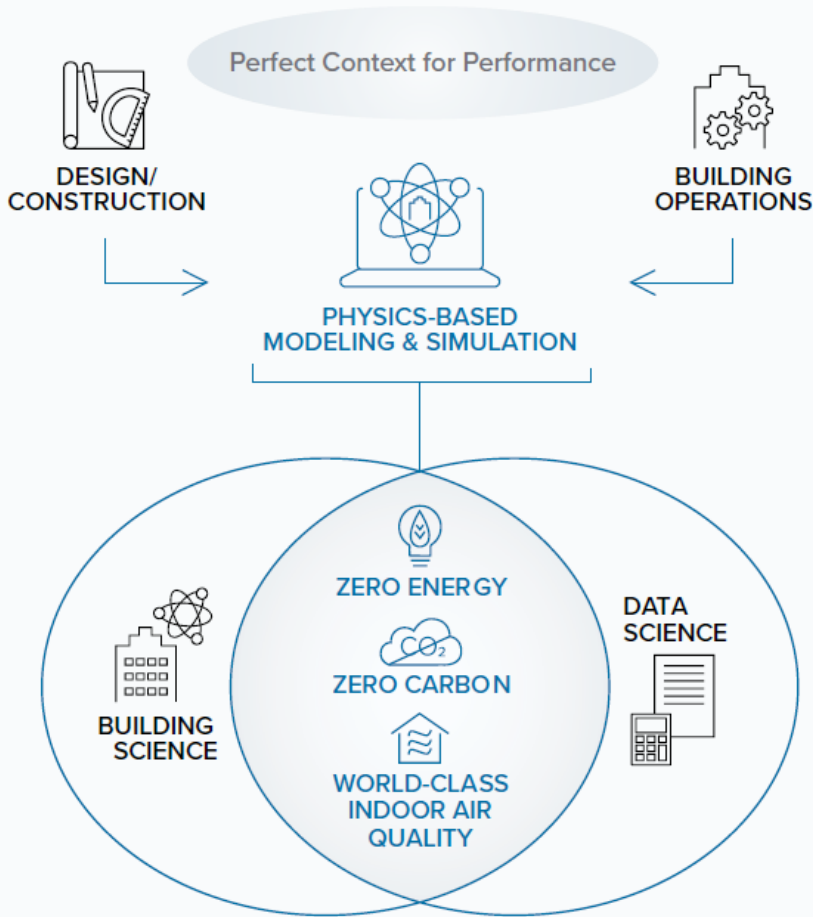




Simulation is the Superpower

This is the only predictive tool that ensures every dollar of investment can be tied to an expected result.

Simulation, in a Physics-based Environment, is a Superpower





PROJECT HAYSTACK ENABLING ZERO CARBON ...

... the intersection of building science and data science

Project Haystack's Role in Building Decarbonization

To deliver these results, the data science community needs to make room for the building science community.

Our ask is Simple, create an approach for time-series simulation and whole-building metrics similar to trended meter/sensor and operational technology data.

Can we count on you?

Adam and Craig



ZIVA TECH
SOLUTIONS



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Q&A



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