

FYI in 45 Rapid Energy Modeling

Panelists:
Matt Goss
Mathews Mathai

Moderated by:
Andrew Beaton

September 11, 2019



**CDM
Smith**

Today's Discussion Will Focus On

- ▶ The drivers behind energy optimization
- ▶ How the Rapid Energy Model (REM) tool accelerates the process of energy audits
- ▶ A demonstration of the REM tool
- ▶ Considerations for using the REM tool

Our Panel



Matt Goss

Vice President, Technical Strategy Leader



Mathews Mathai

Senior Business Consultant,
Infrastructure Solutions at Autodesk

An aerial photograph of a campus or industrial site, overlaid with a semi-transparent blue filter. Various buildings and structures are highlighted with semi-transparent colored rectangles in shades of yellow, cyan, magenta, and light blue, representing energy modeling data. The background shows a mix of greenery and paved areas.

The Benefits of Energy Modeling

Energy modeling & optimization is ideal for:



**Large-scale
energy users**



**Managers of
facility campuses**



Federal agencies

Drivers for Energy Optimization



Energy
Mandates

Increase
efficiency/
reduce cost

Maximize energy
efficiency &
resiliency

Reduce footprint
in the future

Challenges with Energy Audits



Expensive



Time Consuming



High Level of Expertise

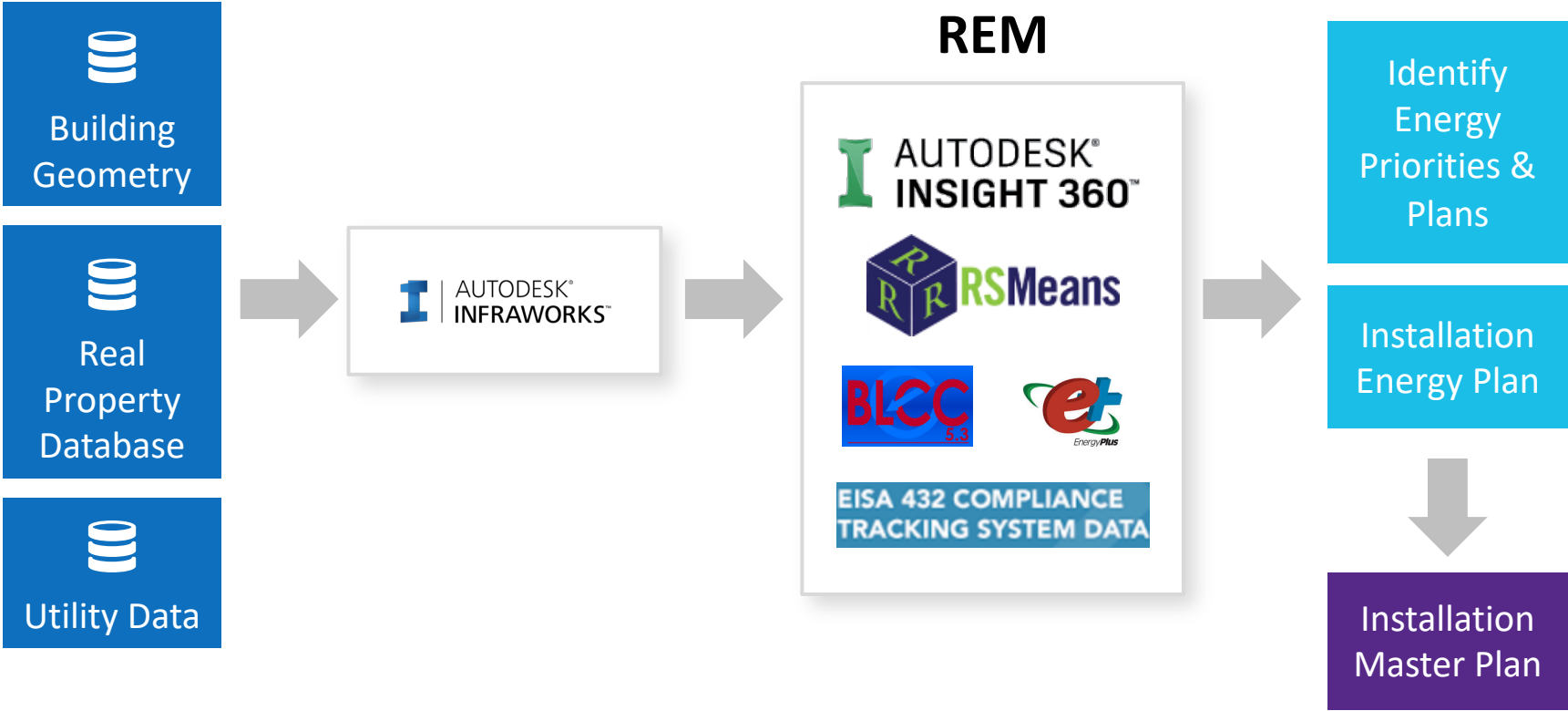
ASHRAE Energy Audit



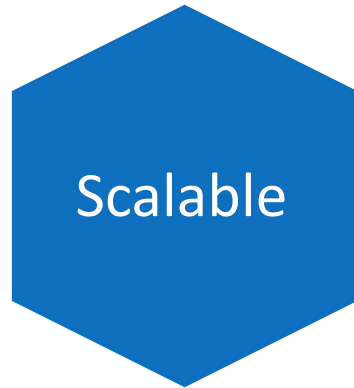
An aerial photograph of a hospital campus, overlaid with semi-transparent 3D architectural models of various buildings in different colors (yellow, cyan, red, blue, green). The text "Introducing the REM" is centered in white. The background is a dark blue gradient.

Introducing the REM

Connected & Automated Workflow



Empowering Data-Driven Policy Decisions



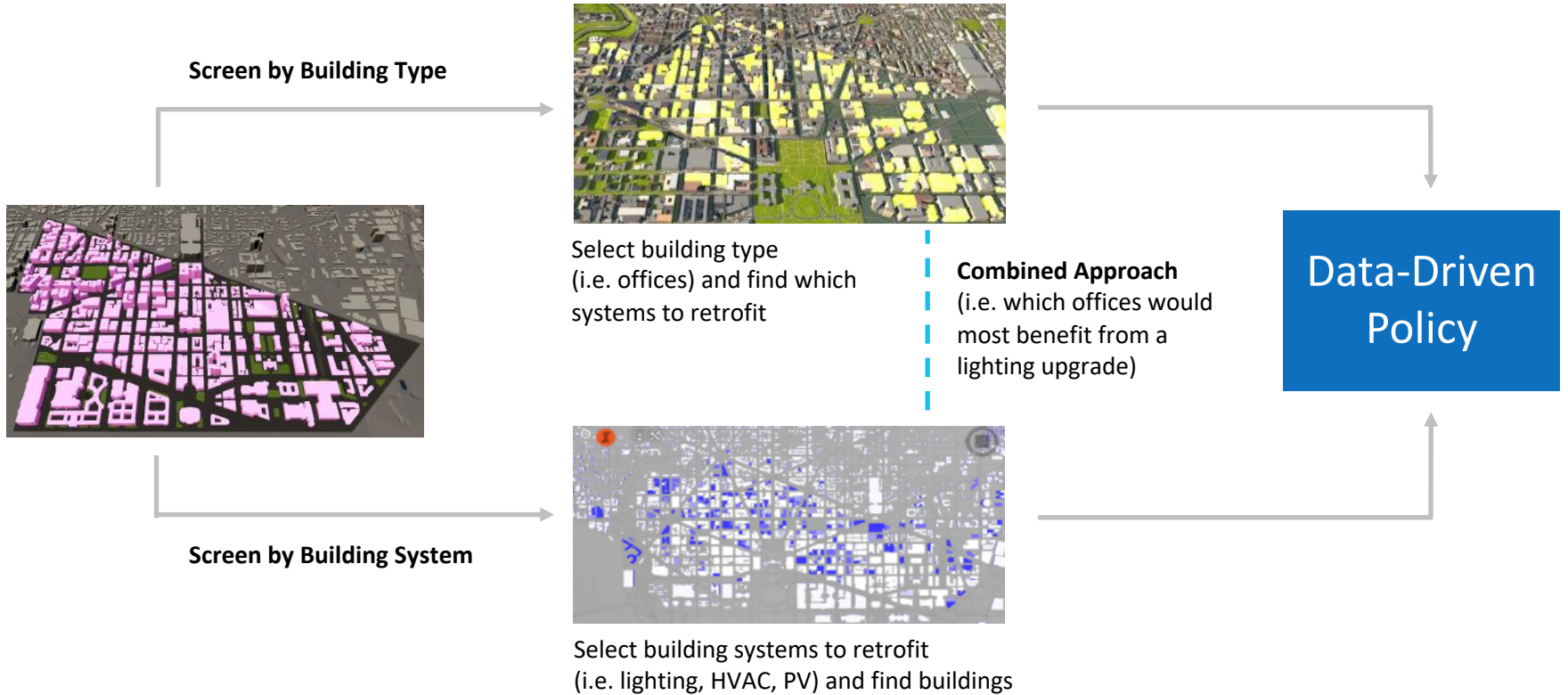
An aerial photograph of a large industrial or research facility, possibly a pharmaceutical plant, with several buildings highlighted in various colors (yellow, cyan, red, green, blue). The facility is situated in a valley with a river or stream winding through it. The text "Demonstrating the REM" is overlaid in white on the image.

Demonstrating the REM

An aerial photograph of a hospital campus, overlaid with a semi-transparent dark blue filter. Numerous 3D architectural models of buildings are scattered across the site, rendered in various colors including yellow, cyan, magenta, and red. The models vary in size and shape, representing different types of hospital structures. The background shows the natural terrain, roads, and parking areas of the campus.

Putting the REM to Work

The Rapid Energy Model (REM)



Project Stats

20

Buildings

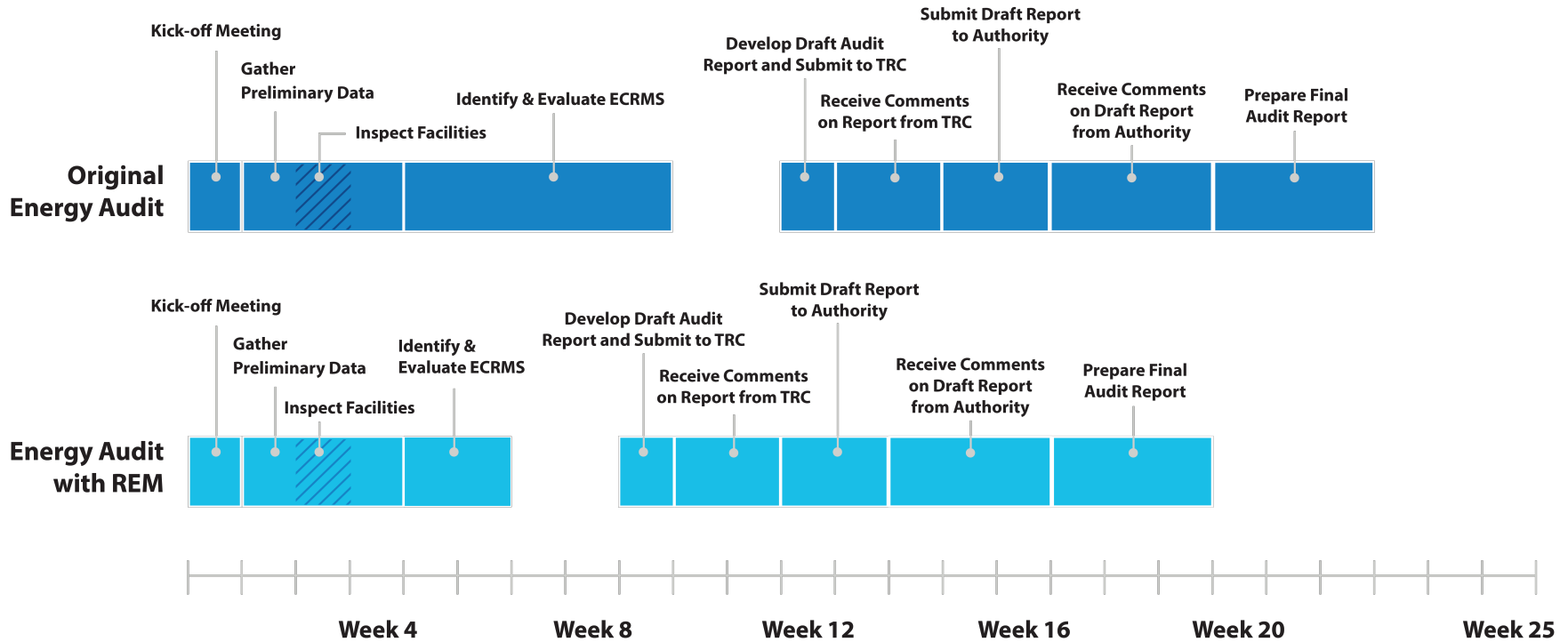
1900

Acres

19 - 101

Years old

Delivering Sooner with REM





An aerial photograph of a campus with several buildings highlighted in various colors: yellow, green, cyan, blue, and red. A large cyan cross-shaped building is prominent in the center. The campus is surrounded by greenery and a road network. The word "Considerations" is overlaid in white text in the center of the image.

Considerations

Information to Get Started

Need

- Address
- General Building Geometry
- Building Use

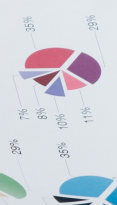
Nice to Have

- Vintage (Year Built)
- Materials use for construction
- Number of Occupants

An aerial photograph of a campus, heavily tinted with a dark blue color. Overlaid on the image are several 3D block models of buildings in various colors: yellow, green, cyan, red, and blue. The models are scattered across the campus, with a prominent cyan cross-shaped building in the lower center. The text "Looking Ahead" is centered in white, sans-serif font.

Looking Ahead





An aerial photograph of a hospital campus, overlaid with semi-transparent 3D models of various buildings in different colors (yellow, green, cyan, blue, red, pink). The text "Questions & Answers" is centered in white. The background is a dark blue gradient.

Questions & Answers

Contact Information

Panelists



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Mathews Mathai

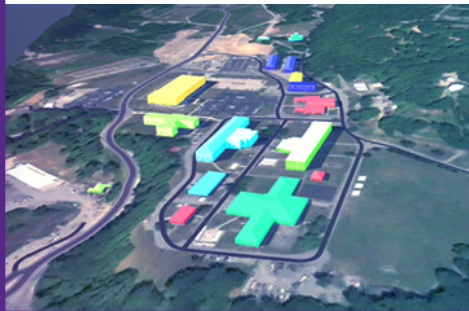
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Moderator



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Thank You