Michigan Green Communities Conference
June 15, 2016

Liesl Clark, President
Current IEI Board of Directors

- Lauren Bigelow, Growth Capital Network
- Tom Catania, UM Erb Institute for Global Sustainable Enterprise
- Keith Cooley, Principia LLC
- Bruce Goodman, Varnum LLP
- Jim Saber, NextEnergy
- David Simon, TOGGLED
- Levi Thompson, UM Hydrogen Energy Technology Laboratory
Overview of Current IEI Activities

Research and Policy and Market Development
- New Utility Business Models
  - Demand Response
  - Solar on the Grid
  - Distribution Planning
- Clean Power Plan
  - Michigan Compliance Strategies
  - STEER Modeling

Community Energy Initiatives
- Solarize Michigan
- Grand Rapids 2030 District
- Wind Works in MI

Industry Engagement
- Industrial Energy Efficiency Roundtables

Other Activities
- MPSC Interventions
Grand Rapids 2030 District

Launched Grand Rapids 2030 District with Monday press event

- 39 Founding Members
- 61 buildings
- 10M sq. feet of real estate
- Larger than San Francisco

Voluntary goals by building owners to reduce building energy consumption, water use, and transportation emissions by 50% by 2030 across downtown area

- New buildings would be carbon neutral by 2030

“This will take Grand Rapids further faster than any other sustainability initiative we have done.”

Former Grand Rapids Mayor, George Heartwell
Grand Rapids 2030 District

Key Elements

➢ Private Sector Led
   Community-based effort led by private sector leaders
   Entirely voluntary; does not involve additional layers of regulation or bureaucracy
   Focused on market realities and real-world solutions

➢ Focused on Energy, Water, and CO2 from transportation
   Targets developed locally in line with Architecture 2030 Challenge for Planning
   Focused on range of sustainability measures

➢ Involves both new and existing buildings
   Building performance benchmarked against national average for similar buildings (CBECS 2003)
   Water and transport emissions for new buildings benchmarked against current District averages
   - Requires initial benchmarking of District performance

➢ Part of growing network of leading cities
   @GR2030
Current 2030 Districts

GRAND RAPIDS
EMERGING
2030
DISTRICT

SEATTLE
2030
DISTRICT

SAN FRANCISCO
2030
DISTRICT

LOS ANGELES
2030
DISTRICT

DENVER
2030
DISTRICT

ALBUQUERQUE
2030
DISTRICT

DALLAS
2030
DISTRICT

SAN ANTONIO
2030
DISTRICT

TORONTO
2030
DISTRICT

STAMFORD
2030
DISTRICT

CLEVELAND
2030
DISTRICT

PITTSBURGH
2030
DISTRICTS

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Institute for Energy Innovation
2030 Commitments: Targets and Measurement

Existing Buildings

New Buildings/ Major Renovations

The 2030 Challenge for Planning: Existing Buildings
Source: © 2011 GR2030, Inc. / Architecture 2030. All Rights Reserved.

The 2030 Challenge for Planning: New Buildings & Major Renovations
Source: © 2011 GR2030, Inc. / Architecture 2030. All Rights Reserved.
*Using no fossil fuel GHG-emitting energy to operate.
Solarize Michigan

- Reach enough installations to prime the local market for solar
- Michigan only accounts for 0.2% of the entire national deployment
- There are currently only 22 installations within the three counties
- Develop long-term sustained growth through solar contagion to support the supply-chain and major employers
Solarize Michigan

Midland, Bay, and Saginaw Counties

Partnering with Traverse City efforts

75 sign-ups, 4 planned installations, 1 completed
Wind Works Michigan

Working with Wind on the Wires, AWEA, Energy Foundation, and developers on series of community conversations about large-scale wind projects

Hosted three public forums on wind – Gratiot, Tuscola, and Sanilac

Next forum set for Cass City – July 18th
Wind Works Michigan

• Build understanding that wind projects are community assets that bring substantial economic, environmental and health benefits to the local communities and residents.

• Demonstrate that wind developers are committed to maintaining a dialogue, keeping communities informed, and responding to community concerns.

• Help the wind industry learn about and understand concerns from local communities and address issues in a manner that builds relationships, inspires confidence and enables consensus.
Is Wind Energy affordable?

"The most recent contracts approved by the Commission for new wind capacity have levelized costs in the low $50s per MWh range, which is about 10 percent less than the least expensive levelized contract prices from 2011 and half of the levelized cost of the first few renewable energy contracts approved in 2009 and 2010." The cost of electricity from a new coal plant is estimated at $133 per MWh. -Michigan Public Service Commission. Report on the Implementation of the P.A. 295 Renewable Energy Standard and the Cost-Effectiveness of the Energy Standards.
Research and White Papers

Engaged in workgroup on new utilities business models – focused to date on demand response, may shift to distribution grid, PBR

- Considering development of white paper to advance what has been limited discussion
- May also work to identify other opportunities

Also engaged in Clean Power Plan SIP development

- Likely to be involved in stakeholder group
- Seeking add’l opportunities