New Mobility

Typically when we think of mobility, the first thought that comes to mind is a vehicle. New Mobility is different.

New Mobility describes the integration of transportation, energy and information systems into solutions - with elements of each. The result is a "system of systems" for moving people, goods, information and energy that is holistic, dynamic and more efficient and sustainable than traditional options.

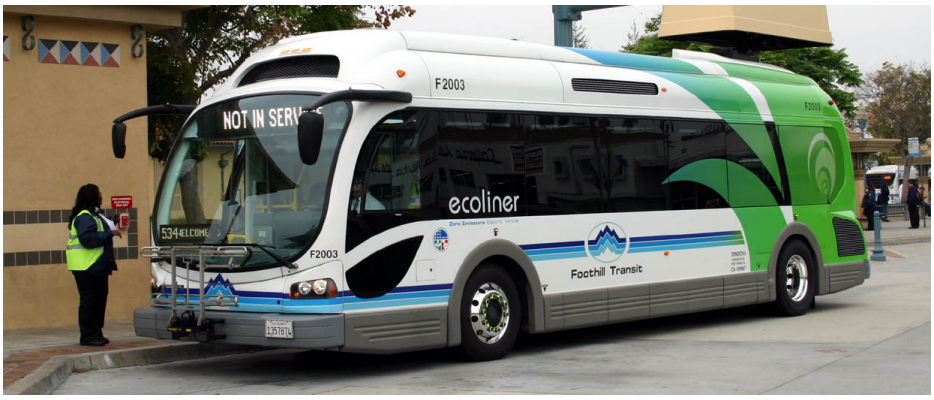
While New Mobility includes the next generation of vehicles, it will require a portfolio of products and services across all levels of the system to create flexible and resilient mobility options that are accessible and adaptable to local needs.

New Mobility

Consumer level
Application level
Hardware level
Infrastructure level

- Incremental and disruptive technology at each level
- New service models at each level
- Opportunity for resource and energy (fuel) efficiency gains at each level
- **Biggest opportunity = matchmaking across entire system**

For consumers, it means solutions that enhance our lives such as wayfinding apps with real-time information and new mode options, such as car share and rapid transit. For industry, it means evolving markets for existing businesses or new venture opportunities for individuals. For infrastructure providers, it means exploring new forms of public private partnerships for innovation.



Source: www.proterra.com

What if our smartphone could tell us when the next bus was arriving in real-time? What if that bus had dedicated lanes and traffic signal priority to bypass traffic? What if it were powered by renewable energy and had zero-emissions?

At NextEnergy, we see an opportunity to develop open innovation initiatives, crowdsourcing platforms, and venture challenges that bring cross-functional working groups to accelerate the development of next generation solutions across all levels of New Mobility.

These are important in order to create agility for industry to respond quickly to new market conditions and changing consumer behavior. They are also important, because efficiency gains due to real time information, system optimization and consumer behavior shifts have the potential to play a significant role in creating sustainable mobility options that address energy security, economic competitiveness and environmental responsibility.

NextEnergy interests:

- Identify business opportunities in evolving market conditions
  - Map Michigan assets
  - Advance the transition of existing businesses into the space
- Accelerate innovations and entrepreneurship
  - Scout technologies
  - Support hackathons & MobiPrize
- Create cross-functional working groups
  - Informational & networking events
  - Targeted matchmaking
- Accelerate commercialization of next generation technologies
  - Leverage NextEnergy EV and smart grid assets and testing capabilities
  - Identify potential demonstration & collaborative R&D projects
- Support public private innovation to accelerate market development
  - Explore energy strategies and funding priorities
  - Research role of standards and regulations on technology development
  - Support strategies to leverage infrastructure investments to accelerate technology, business and industry development

NEXTENERGY ask us what's next

SMART
Sustainable Mobility & Accessibility Research & Transformation

About NextEnergy

Located in midtown Detroit's innovation corridor, NextEnergy is a 501(c)(3) nonprofit organization and one of the nation's leading accelerators of advanced energy technologies, businesses and industries.

Since its inception in 2002, NextEnergy has helped attract more than $1 billion of new investment in the state of Michigan, including programs in excess of $150 million in which NextEnergy has directly participated.

- Smart Grid
- Advanced-Energy Storage
- New Mobility Systems
- Electric Vehicle Infrastructure
- Energy Efficiency
- Power Electronics
- Renewables: Wind, Solar, Biofuels
- Vehicle Electrification

NextEnergy continually investigates "what's next" in advanced energy – looking ahead to assess market trends, technology innovation, policy, and investment strategies in the following areas:

Technology Demonstration & Commercialization

NextEnergy utilizes our unique and innovative testing capabilities and assets to provide demonstration and validation services for both private and publicly-funded programs. We provide comprehensive program management services and advise our partners on commercialization of advanced energy technologies, components and systems.

Industry & Venture Development

NextEnergy assists energy ventures through the utilization of market intelligence to support technology commercialization and advance the transition of existing businesses into the advanced energy technology industry. We work to attract advanced energy companies to Michigan in partnership with the state's economic development organizations.

Public Sector Leadership

NextEnergy partners with federal, state and local governments and agencies, philanthropy, industry and various stakeholders to design future energy strategies, advise on funding priorities, and administer and evaluate energy-related programs. We inform our broad network on industry trends by convening stakeholders, sharing program outcomes and reporting on industry trends.

The NextEnergy Center is a vibrant campus with state-of-the-art research labs, testing and validation platforms, and conference, training, and exhibit facilities. We are home to several advanced energy technology demonstrations, including:

- Next generation dual bi-directional charging module (DBCM) power management system that performs Alternating Current (AC) and Direct Current (DC) charging and discharging of various power devices
- Next generation DC power distribution demonstration showcasing the energy performance, reliability and commercial viability of an innovate DC power grid with integrated renewable power sources
- Next generation light emitting diode (LED) lighting demonstration highlighting five types of LED lights from four Michigan lighting companies

NEXTENERGY
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