

The Energy Lab & Solar Panels

A generator provides the main electrical needs to the Energy Lab while solar (photovoltaic) energy panels have been installed on the roof to supplement this traditional energy source. The photovoltaic panels convert sunlight into electricity.

The total solar energy that the Energy Lab collects over the course of one year is equivalent to 1 Megawatt hour. That's enough energy to run a TV for five years or an iPod for the next 38 years! The energy gauges show the amount of energy being created and used. The Energy Lab does not need to draw energy from the national power grid - it's completely self-sustaining.

The Energy Lab was built using recycled aluminum and also incorporates the latest developments in LED lighting to reduce operational costs. The vehicle engines have been built to meet the highest Environmental Protection Agency (EPA) standards and uses exhaust gas recirculation technology to reduce [nitrous oxide](#) (N₂O), a greenhouse gas to almost zero.

Our current energy system is inefficient. Just over 50% of the energy that we produce is lost in its production, transmission or distribution. Utilizing technology and new renewable energy resources will increase our energy efficiency with economic benefits for consumers and businesses alike. This is a challenge that we face, but it's a challenge filled with opportunity.

“Providing incentives for energy-efficiency and clean energy are the right thing to do for our future – because the nation that leads the clean energy economy will be the nation that leads the global economy. And America must be that nation.”

Remarks by the President in the State of the Union Address, January 27, 2010

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