

In My Backyard (IMBY)



TAP Webinar

Christopher W. Helm
Christopher.helm@nrel.gov

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Overview

- In My Backyard
 - What it does...
 - Current Capabilities
 - How it works
- The IMBY Platform
- Future of IMBY
- Live Demo



What IMBY does...

IMBY is an easy to use PV/Wind simulator for the entire U.S.

1. Places user drawn PV/Wind on rooftops/yards
2. Simulates the production potential
3. Informs on generation, cost, and savings



Current Capabilities (PV)

Hourly Generation

IMBY uses a modified version of PVWatts to run generation estimates for every hour of the year

Building Load Profiles

IMBY utilizes NREL's expert knowledge of building efficiency to estimate PV impacts on building loads

PV Payback

Up-to-date incentive data from DSIRE allows IMBY to calculate the total costs and the number of years to break even

Monthly Utility Savings

Local electric rates are used to determine the reduction of the user's monthly electric bill

Current Capabilities (Wind)

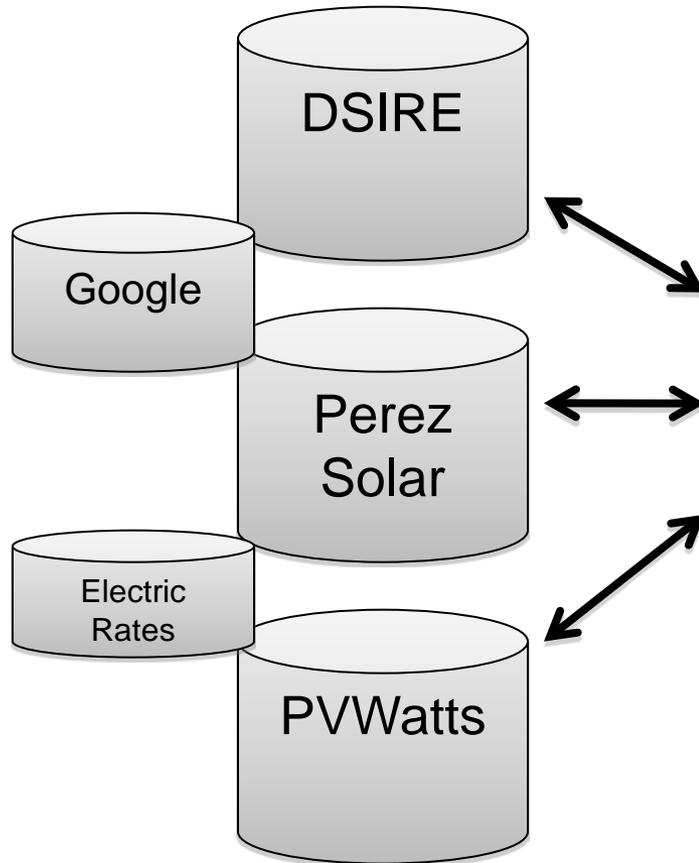
Monthly Generation

IMBY uses a modified version of HOMER's wind engine to run generation estimates for every month of the year

Limited to 38 states due to resource availability

No Economics have been built into the Wind simulations

How it works...



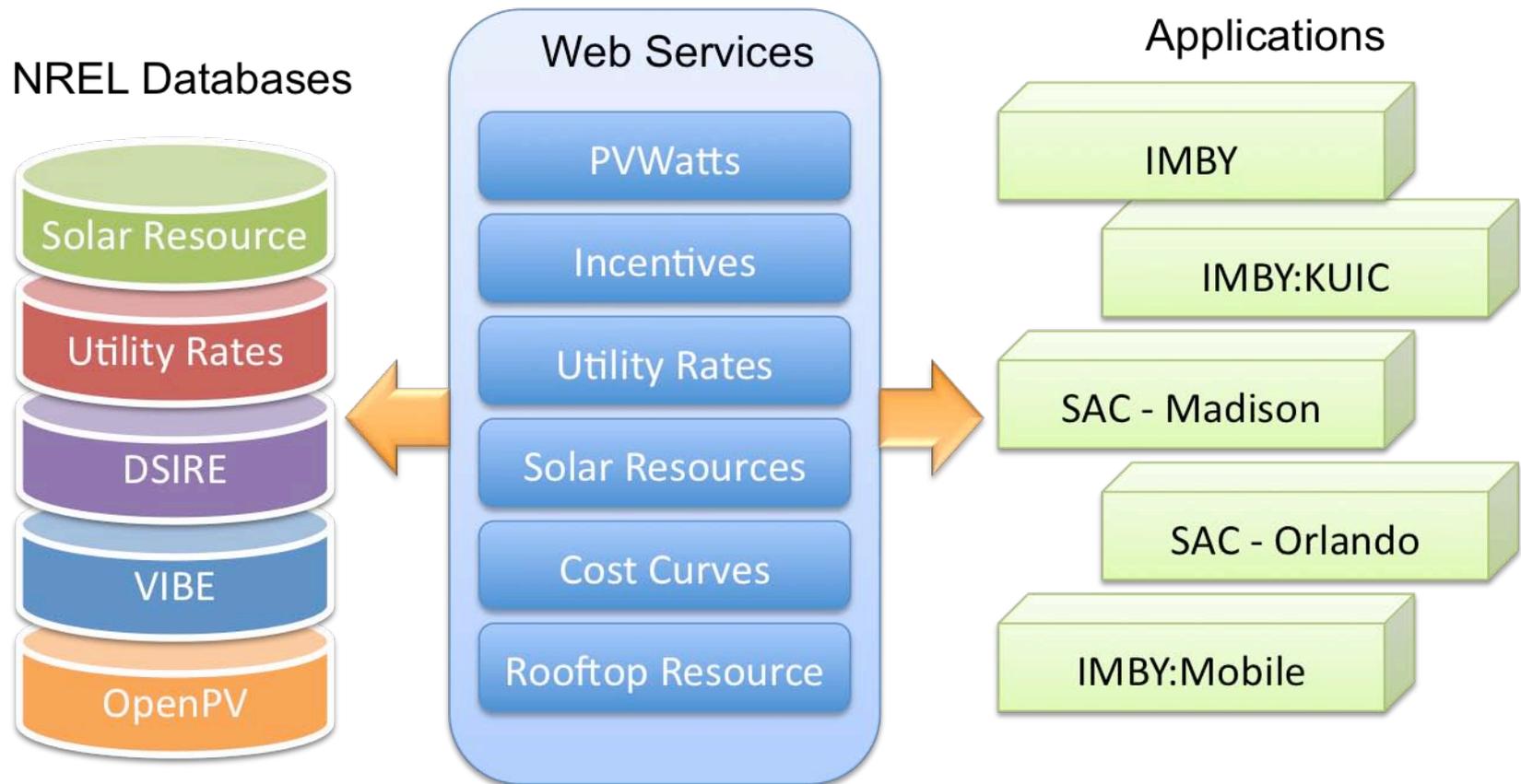
IMBY is a “mash-up”



Of various datasets and models

The IMBY Platform

The services inside IMBY can be used to create other “mash-ups”



The Future of IMBY

IMBY 2.0!

- User logins:
 - Installations can be saved
 - reconfigured and remodeled
- Enhanced wind simulations
 - Hourly results & economic calculations
- Dynamic Building loads
 - 16 buildings types

Open API

- A publicly available API

A Live Demo

Current Release - <http://mercator.nrel.gov/imby>