

International Jobs and Economic Development Impacts (I-JEDI) model

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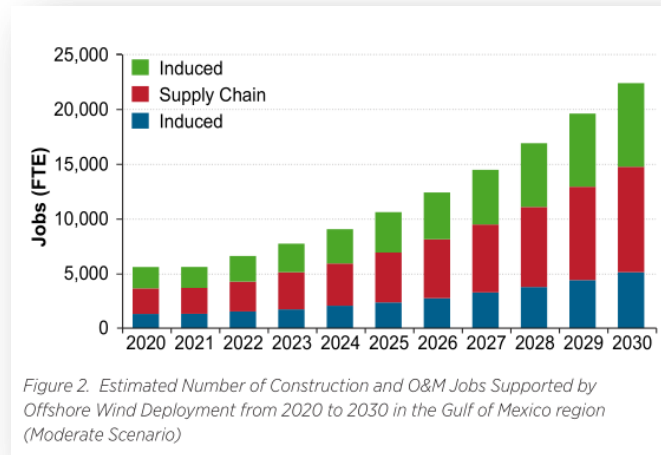
I-JEDI

- Jobs and Economic Development Impact
 - International version developed under USAID EC-LEDS program
- Quantify the **economic impacts of building and operating renewable energy projects**



JEDI Tool

- Jobs and Economic Development Impact
- Estimates the economic output and jobs supported by the **construction and operation of electricity generation plants**
- Developed by NREL since 2004

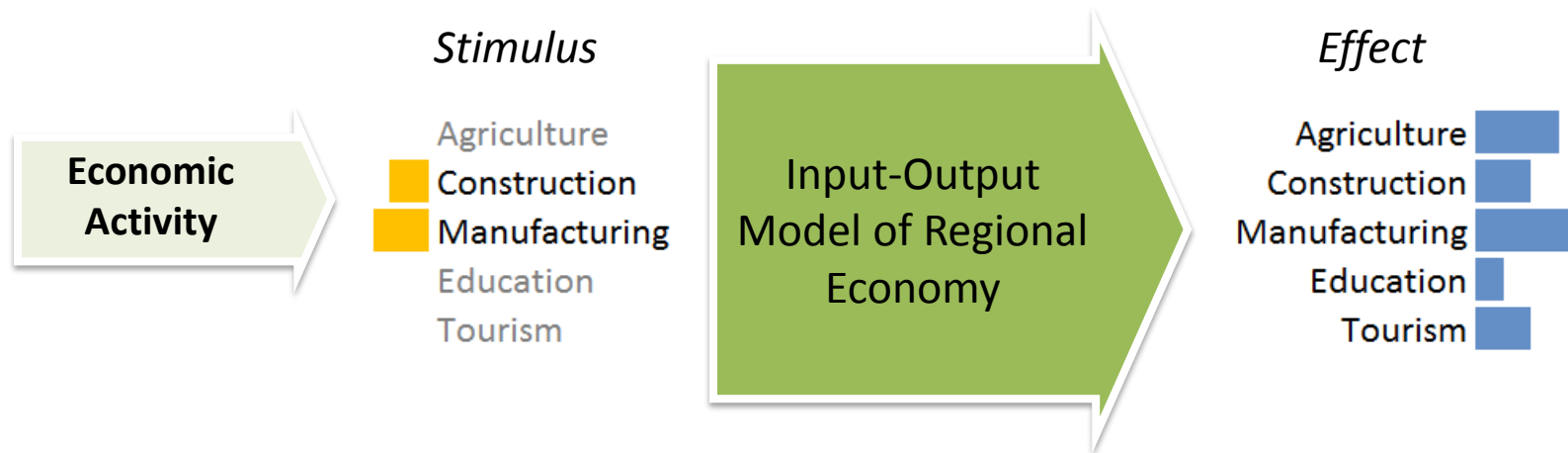


International Applications (I-JEDI)

Excel-based tool; Biomass, wind, PV, geothermal



How does the I-JEDI work?



I-O Models estimate the effects of a commercial activity on the rest of the economy within the area of analysis

I-O Model

- I-O Models capture transactions within the region of analysis
- I-JEDI data requirements:
 - costs of construction and operation
 - percentage of costs within region of analysis



Inputs

- Deployment data
 - Project(s) size in megawatts (MW)
 - Percentage of labor and materials sourced locally
- Regional data needed for custom regions
 - Regional installation costs
 - Regional average annual salaries per industry
 - Regional social accounting matrix

I-JEDI Outputs

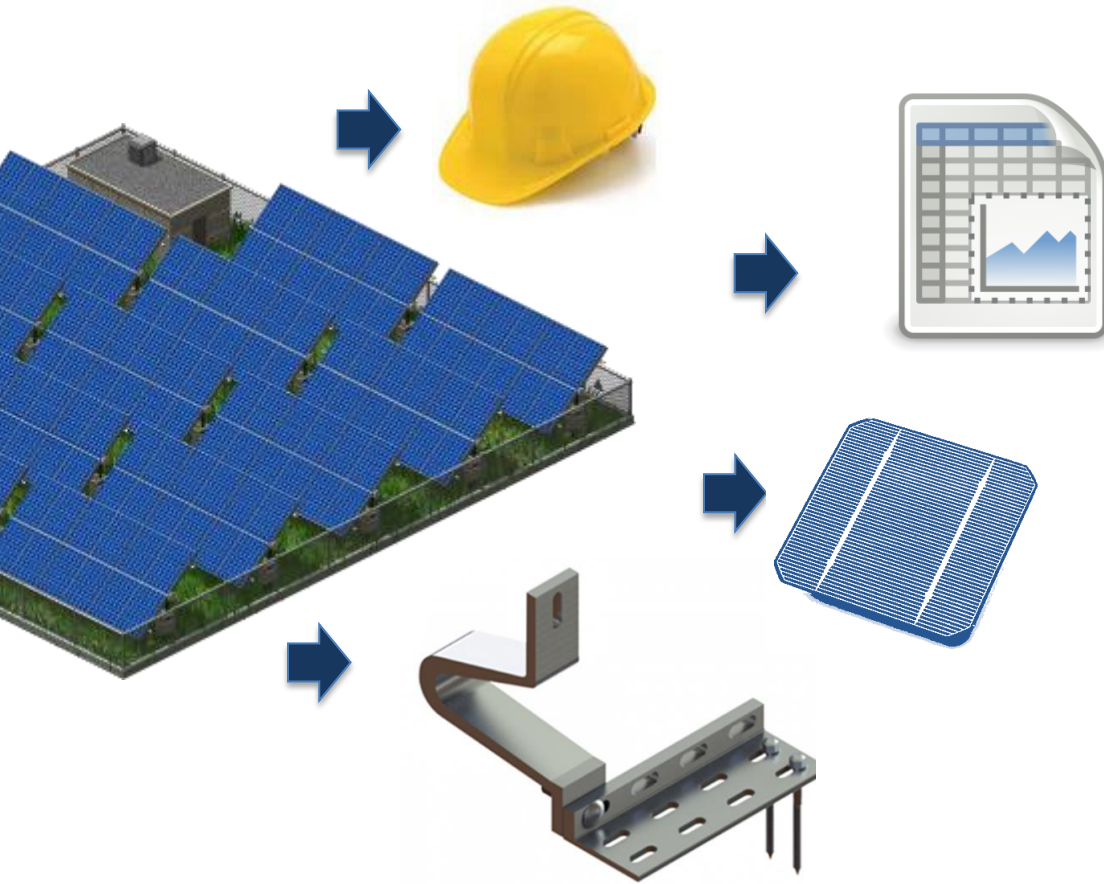
Types

- Jobs
- Salaries
- Economic Outputs
- GDP

Categories

- Direct
- Indirect
- Induced

Direct Project Development



Direct, Indirect Supply Chain



Direct, Indirect and Induced Effects



Results



Construction

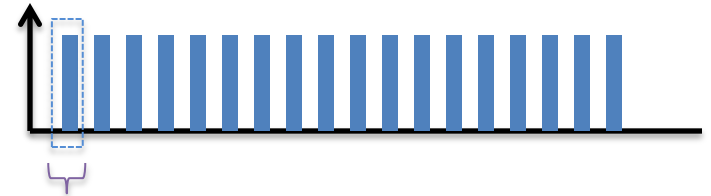
Direct jobs	Direct earnings	Direct economic output	Direct GDP
Indirect jobs	Indirect earnings	Indirect economic output	Indirect GDP
Induced jobs	Induced earnings	Induced economic output	Induced GDP

Operation

Direct jobs	Direct earnings	Direct economic output	Direct GDP
Indirect jobs	Indirect earnings	Indirect economic output	Indirect GDP
Induced jobs	Induced earnings	Induced economic output	Induced GDP



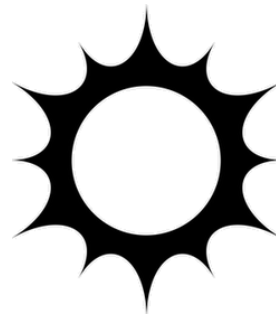
Total – One-time



Annual – On-going

I-JEDI Caveats

- I-JEDI results are linear
 - Economies of scale are not built into default data
- I-JEDI doesn't evaluate project economic feasibility or levelized cost of electricity
- I-JEDI results are gross, not net
 - A new economic activity could displace or occur instead of other activities



I-JEDI Support Resources



- User manuals in English and Spanish
- Online tutorial
- Fact sheet and success story
- Remote expert assistance through LEDS Global Partnership and Clean Energy Solutions Center
- Access all I-JEDI resources and download the tool at:
www.ec-leds.org/tools-page/development-impact-assessment-tools

Thank you

Questions?

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