

# Renewable Energy Policy Supply Chain

- Complementary nature of the current energy policies has had a positive impact on employment and enhanced the growth of electricity produced from renewable sources; these programs are not redundant
  - Renewable manufacturers**, the *48c tax credit* has stimulated the U.S. supplier base of capital equipment, resulting in increased employment and lower priced equipment, ultimately resulting in lower-priced electricity for the rate-payers; *1703/05 DOE LG programs* are critical to provide debt financing for manufactures and developers, particularly for innovative technologies
  - Renewable developers** are directly aided by the *Production Tax Credit (“PTC”)* for wind, *Investment Tax Credit (“ITC”)* for solar, geothermal and biomass, and more recently the *1603 Cash Grant*; 1603 Cash Grant has provided certainty for tax equity financing and boosted the insufficient tax equity supply to meet the demand of developers
  - State renewable portfolio standards (“RPS”) initiated and increased **end-market** demand for renewable energy, providing long-term power purchase agreements (“PPAs”) for developers that underpin project financing; *Federal CES* would drive additional PPA demand and lead to a national renewable energy credit (“REC”) market

## Renewable Manufacturers:



### Federal Government Programs:

- 48c Tax Credit** – provides 30% tax credit to manufacturers producing renewable generating capital equipment
- 1703/05 DOE LG** – provides certainty and enhances supply of debt capital for manufacturers and developers
  - **Concern over potential rescission**

### Federal Initiatives Under Consideration:

- Clean Energy Deployment Administration (“CEDA”)**

Capital Equipment:

→  
(Wind turbines, PV solar cells, etc.)

Cash Payment:

←  
(Made possible through project financing)

## Renewable Developers:



### Federal Government Programs:

- PTC / ITC** – enhance project economics temporarily until sufficient industry scale and grid parity is achieved
- 1603 Cash Grant** – provides certainty and enhances supply of tax-equity
  - **Extension to 2012 under consideration**

### Federal Initiatives Under Consideration:

- National transmission policy that includes regional planning and clear cost recovery mechanism**

Renewable Electricity:

→  
(Meets RPS demands)

Investment Grade Cash Flows:

←  
(Provided by PPAs; critical for project financing)

Transmission

↔

## End Market: Renewable Electricity Users



### State Government Programs:

- RPS** – require load serving entities to purchase and provide renewable electricity to rate-payers
  - Only reaches full potential when enforceable

### Federal Initiatives Under Consideration:

- Clean electricity standards (“CES”)** – should generate more demand and PPAs for developers and lead to a **national** renewable energy credit (“REC”) market
  - Only reaches full potential when enforceable