US Market Series

Renewable Energy | Inflation Reduction Act (Overview)

Introduction

- The Inflation Reduction Act (IRA) is a substantial stimulus package aiming to rejuvenate the U.S. economy and expedite the green transition through strategic investments of $430 billion across key sectors, including clean energy ($250.6 billion), advanced manufacturing ($47.7 billion), and electric vehicles (EVs) & batteries ($23.4 billion).
- The IRA represents the world's largest national investment in clean power to date. American Clean Power estimates the IRA to deliver between 525 and 550 GW of new, utility-scale clean power by 2030, reaching an installed total of 750 GW and generating between $550 and $600 billion in capital investment.
- While numerous other technologies such as biofuels or geothermal power, as well as investments into grids, battery storage systems and energy efficiency also play a notable role, we want to focus our US Renewables Market Series on these three segments in the upcoming editions following the present introduction:
  1. Solar power – including residential applications and large solar farms;
  2. Wind power – including onshore and offshore wind;
  3. Hydrogen – including green and blue hydrogen.

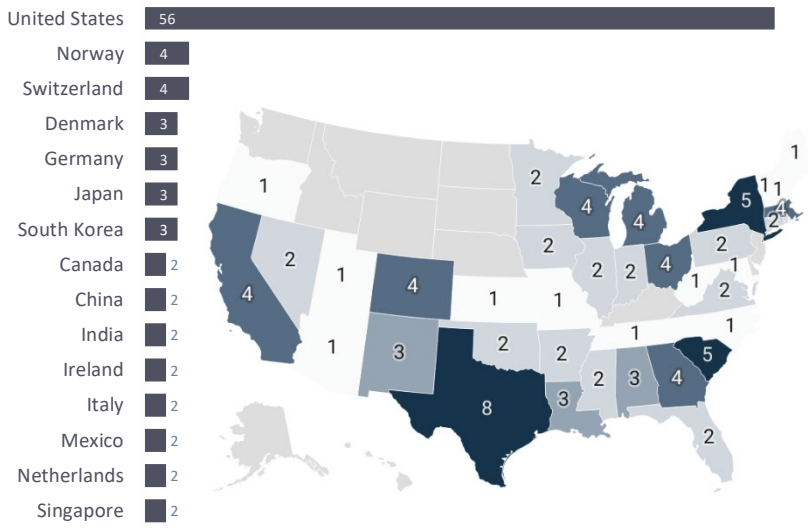
IRA driven Investments during Year 1

- Of the 223 investment projects tracked over the past year, only 34 (15%) were realized by European companies. 20 of these 34 were related to Renewable Energy (see table next page), while the remaining were related to Electric Vehicles and Batteries.
- The map on the right shows the total project numbers per State for Renewables, with the Top 10 US States receiving Renewable investments being:

State	Solar	Wind	Hydrogen
TX	3	1	2
NY	1	1	1
SC	5		
CA	1	1	2
MA	1	1	2
OH	4		
MI	2		1
CO	2	2	
GA	4		
WI	2	1	

- 92 of the 223 investment projects announced during the past 12 months were related to Renewable Energy, led by Solar Power (46 projects) and followed by Wind Power (17 projects), and Hydrogen (12 projects). 14 of the 92 projects were in Grid/Electrification, which may relate to both Renewable and Conventional Energy.

Number of IRA related Renewable Energy projects in the US by top source countries



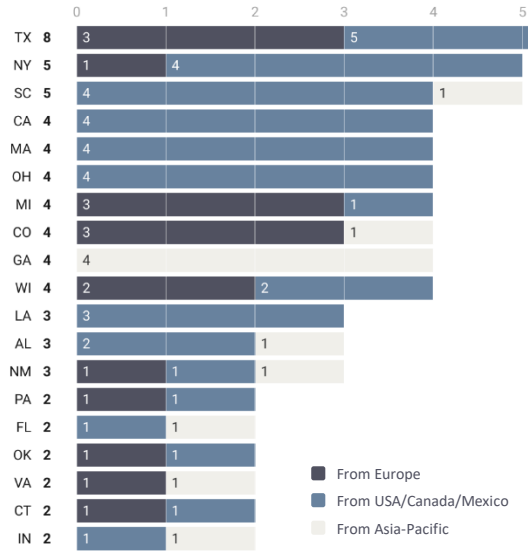
Source: E2.org and Enovado research

US Market Series

Regional Distribution of Renewable Energy Investments

- Investors seem to prefer the Central electricity distribution region (covering the area from Texas to North Dakota, Michigan, and Missouri), where 28 projects were announced, followed by the Northeast (24 projects) and Southeast (23) regions, and the West with 16 projects.
- European investors have followed this trend, locating 10 projects in the Central region (including 3 in Michigan and 3 in Texas) slightly ahead of the Northeast and the West, with 5 projects, respectively. The table on the right lists all 20 Renewables projects implemented by European companies, arranged chronologically by their date of announcement. Notably, 7 of these projects originated from companies in Scandinavia, and 7 of them from companies in the German-speaking market.
- In contrast, investors from Asia-Pacific only located 1 project in the Central region (in Indiana) and chose the Southeast for 7 out of 12 projects (including 4 in Georgia), while European companies didn't locate a single Renewables project in the Southeast.

Number of projects (per source region) from the Renewables sector in leading US States



Date	Company	Source country	State	Sector	Jobs	Invest ($M)
9/21/22	Seg Solar	Germany	TX	Solar	500	60
12/12/22	Stellantis	Netherlands	MI	Solar	10	-
2/28/23	Nel ASA	Norway	CT	Hydrogen	-	25
3/10/23	Siemens	Germany	KS	Wind	-	-
3/16/23	HydrogenPro	Norway	TX	Hydrogen	-	30
3/3/23	Equinor Wind	Norway	NY	Grid/Electrification	-	215
3/30/23	ABB	Switzerland	NM	Grid/Electrification	55	40
4/21/23	Orsted	Denmark	MD	Wind	145	14
4/26/23	Prysmian Group	Italy	PA	Grid/Electrification	27	23
5/22/23	Enel	Italy	OK	Solar	900	1.000
5/3/23	Nel Hydrogen	Norway	MI	Hydrogen	500	400
6/20/23	Holcim	Switzerland	MI	Solar	-	-
6/26/23	Fugro	Netherlands	VA	Wind	15	-
7/18/23	Vestas	Denmark	CO	Wind	-	20
7/18/23	Vestas	Denmark	CO	Wind	-	20
7/21/23	Revkor, H2Gemini	Switzerland	UT	Solar	-	-
7/28/23	Meyer Burger	Switzerland	CO	Solar	350	400
8/15/23	Siemens	Germany	WI	Solar	12	-
8/15/23	Eaton	Ireland	WI	Grid/Electrification	150	22
8/15/23	Eaton	Ireland	TX	Grid/Electrification	218	100

Source: E2.org and Enovado research

Conclusions

- Despite contrary indications in recent news, European investments constitute a mere 15% of the 223 investments projects attracted during the first 12 months following the IRA's introduction. Narrowing the scope to Renewables yields a mere 20 projects.
- Texas, the US state with the highest installed renewables capacities by far, continued to attract more projects than others. The Lone Star state faces new competitors such as New York or South Carolina, while other top renewables destinations (with the exception of California) such as Iowa, Oklahoma or Kansas did not attract many projects.
- Investors both from Europe and Asia-Pacific also chose upcoming challenger locations such as Michigan and Georgia. Renewables investors in the US therefore face the "agony of choice" as dozens of states seem to be suitable. Our upcoming technology-specific analyses of investment destination trends in our US Market Series will provide further insights and guidance for selecting the optimal location.

About the US Market Series

- Enovado's US Market Series supports European companies contemplating investments in the US market. It is meant to serve as a guideline to assess the market landscape and dynamics, strategic locations, and incentive opportunities, particularly in regard to the present state and evolving facets of the IRA.
- With extensive involvement with US State and regional economic development organizations (EDOs) as well as ongoing dialogue with European automotive suppliers contemplating a North American market entry, Enovado leverages its first-hand insights to add value to the Market Series.

About ENOVADO

- Enovado helps companies investing abroad with various market entry related services like market assessment, site selection or partner search and also offers FDI consulting services, such as strategy, marketing or lead generation support to investment promotion agencies worldwide.
- Founded in 2012 and headquartered in Berlin, Enovado is a young and dynamic organization striving to change the way FDI is being done.