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# Transferable Tax Credits: Explainer

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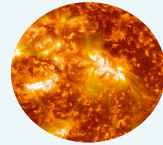
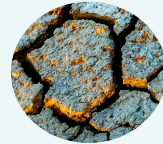
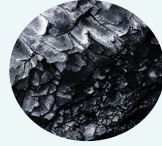


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## Transferability & the new market



The IRA creates a **new, multi-hundred billion dollar market for transferable tax credits** to accelerate the growth of clean energy and decarbonization projects

















# IRA allows companies to offset tax liability & support the energy transition

## Transferability dramatically expands tax credit access

- IRA is the **largest-ever investment in clean energy**—majority of impact achieved via tax credits
- New **transferability mechanism** enables developers to sell federal clean energy tax credits to third-party buyers with federal tax liability
- Prior to the IRA, **the only way for developers to monetize tax credits was through expensive, complex tax equity transactions** which had limited participation
- Today, **Crux works with a variety of corporate buyers and their tax professionals** to integrate TTCs into broader tax planning strategies

## Dozens of technologies now eligible

 Wind	 Solar
 Advanced manufacturing	 Nuclear
 Industrial decarbonization	 Fuel cells
 EV Charging	 Carbon Capture
 Bioenergy	 Commercial & industrial solar
 Hydrogen	 Battery storage



# Transferability basics

For those new to the market, it is important to understand TTC types, who can purchase these credits, and how to apply TTCs once they are purchased



## What are the types of TTCs?

- IRS established two types:
  - **Section 48 investment tax credit (ITC)**, generated when projects placed in service, sized to cost
  - **Section 45 production tax credit (PTC)**, determined by amount of energy or components produced
- **12 eligible technology** categories



## Who can purchase TTCs?

- **Buyers or partnerships** independent of credit-generating project(s)
- Today, **diverse buyers participate in the market**, from Fortune 500 to family offices, to smaller corporate entities



## How do buyers apply TTCs?

- **Buyer claims credits in its tax year that ends on same date as seller's** by filing transfer election statement
- **Additional considerations** apply:
  - K-1s not typically required, unless allocated out of partnership
  - TTCs can be sold only once
  - 3-year carryback, 22-year carry forward provisions apply



# TTCs accelerate solar deployment, supporting developers & manufacturers

Solar developers and key solar components manufacturers often qualify for TTCs; on Crux, the two most commonly observed are Section 48 ITC and Section 45X PTC

## Section 48 ITC

- Supports **variety of solar project types**, from utility-scale to resi, plus **hybrid storage** projects
- Attractive to developers looking to **achieve step-up** value for project
- **Bonus adders** enhance value



## Section 45 PTC

- Solar facilities with **a high capacity factor relative to their CapEx** may elect PTCs
- **Less common** than Section 48 ITCs within Crux dataset



## Section 45X PTC

- **Advanced manufacturing** TTC supports solar value chain:
  - Key components manufacturers
  - Refiners or recyclers of 50 eligible critical minerals
- **Final guidance** expected in Q4





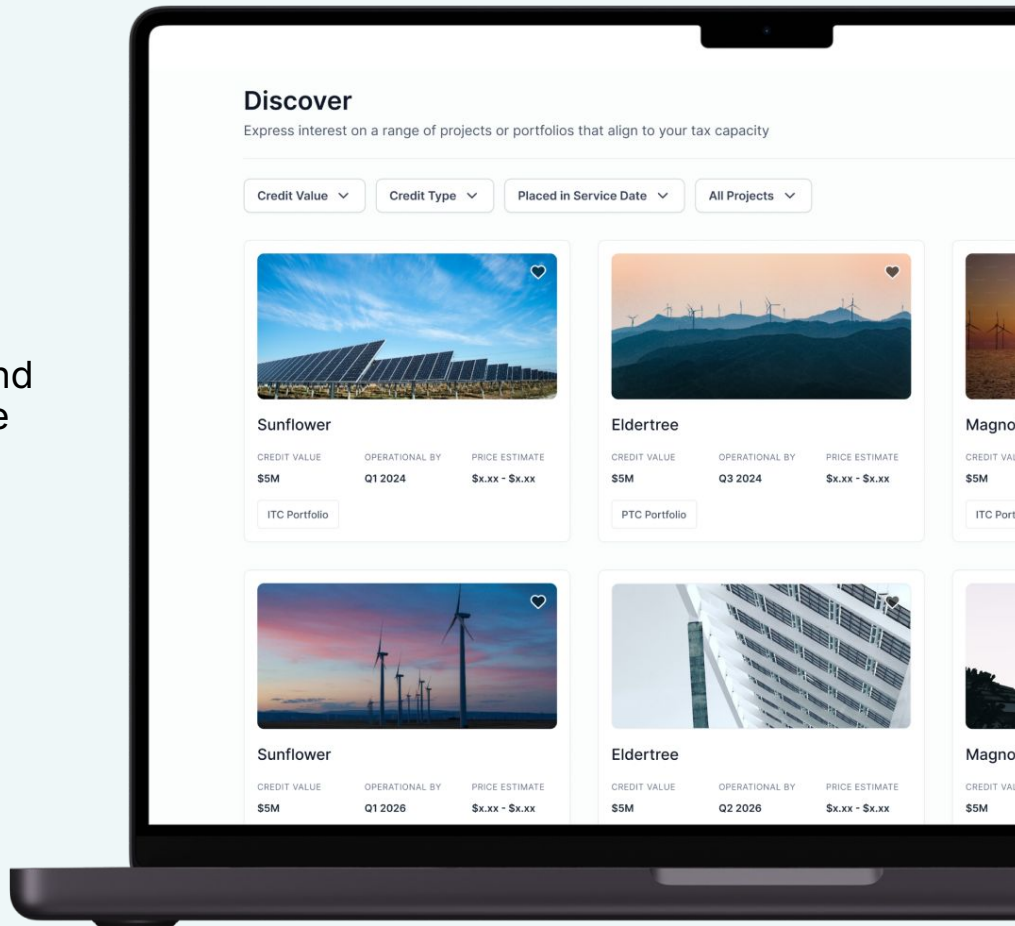
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## Crux 3Q market update



# Efficient finance for the energy transition

Crux is the sustainable finance technology company changing the way clean energy and decarbonization projects are financed in the US, starting with the newly transferable tax credits generated by the IRA.





# Crux operates the industry's central platform for transferable tax credits

\$19B+

historically listed credit supply (Aug. '24)

17

fastest deal closed (days)

275

parties on platform

70%+

Q3 supply with bids in <7 days

\$16B+

bid volume 2024 YTD

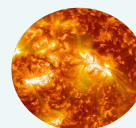
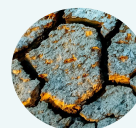
20+

intermediaries on platform



# Crux market insights

- **Crux has largest data set on TTC market**, combining first-party platform data, disclosed transactions, and surveys.
- Market update includes data from over **\$10 billion in closed transactions**.
- Specifically, **Q3 market update provides new insights** on:
  - Updated pricing statistics
  - Market composition
  - Overall market sizing statistics
  - Measures of liquidity
- **Report includes an additional \$11 billion in commercial activity** recorded in the third quarter on Crux.





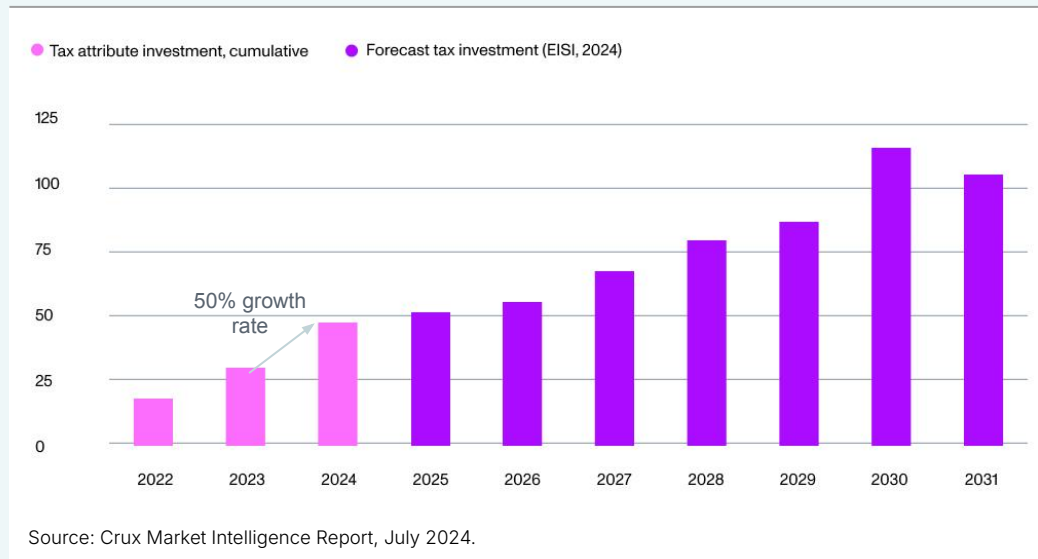
# Crux analysis shows continued acceleration of TTC market

By the end of Q3, Crux estimates that the market completed between **\$16 and \$18.5 billion in transfer deals.**

Inclusive of transfers out of tax equity, **expect market to reach \$22-\$25 billion in total tax credit monetization in 2024** (+50%+ year-over-year).

In addition to transfers, Crux predicts another ~\$20-25 billion in tax equity.

**Total tax attribute monetization, actual and forecast, \$ billions**





# Solar is largest TTC category

- **Solar ITCs make up the largest share of the TTC market**, representing 35-40% of supply in 2024.
- This category includes a **wide range of developers and project types**, from residential portfolios to utility-scale solar.
- Solar TTC pricing has improved quarter over quarter, **generally maxing out at \$0.94-94.5.**
- During 3Q24, **supply of utility-scale solar ITCs has become limited**, driving interest in smaller, distributed generation projects or portfolios of residential, commercial & industrial, or community solar projects.
- Additionally, **Crux is seeing supply shift to 45X Advanced Manufacturing**, which also contribute to solar industry.





# In 1H24, supply skewed towards traditional technology. Especially solar

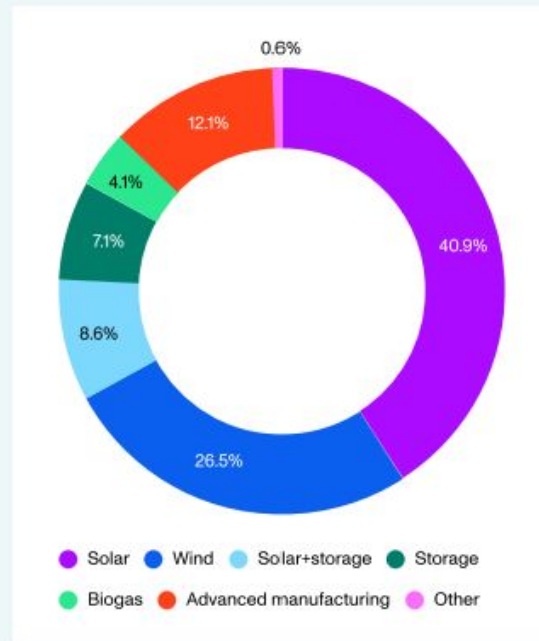
75% of 1H24 reported deals were for solar, storage, or wind-traditional technology types.

**Solar and solar + storage projects accounted for nearly 50%.**

Limited supply of highly transactable, traditional TTC types presents **a constraint in 2H24.**

Other tax credit categories likely to make up a larger share of the market in Q4, including **residential solar projects.**

Figure 16. Share of transacted tax credits by technology type



Source: Crux Market Intelligence Report, July 2024.

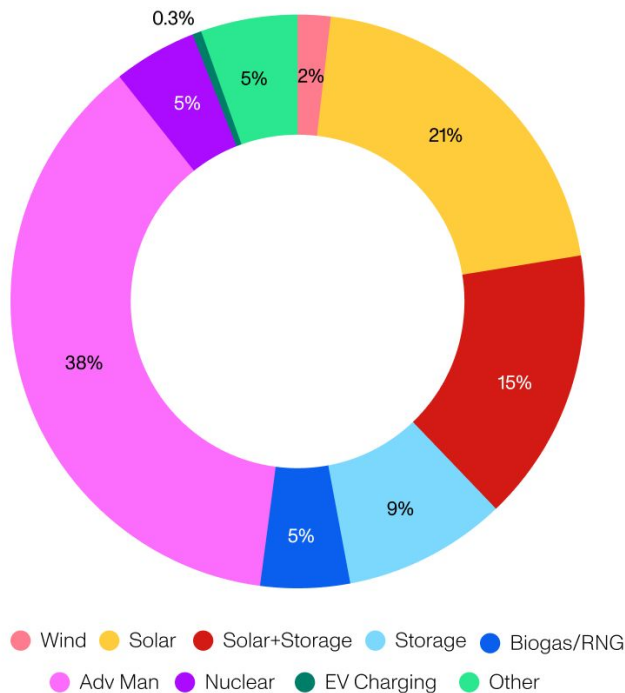


# 3Q data showed tightening solar supply with higher volume in new technologies

3Q2024 tax credit distribution by technology type

Tax credit supply in the third quarter appeared substantially more diverse in 3Q2024 relative to mid-year:

- Solar declined from 40% to 21% of total supply.
- Wind PTC declined from 20% of the market to 2%.
- Increases in 45X advanced manufacturing PTCs from 12% to 38%.
- First nuclear (45U) transactions occurred, contributing about 5% of deal supply.







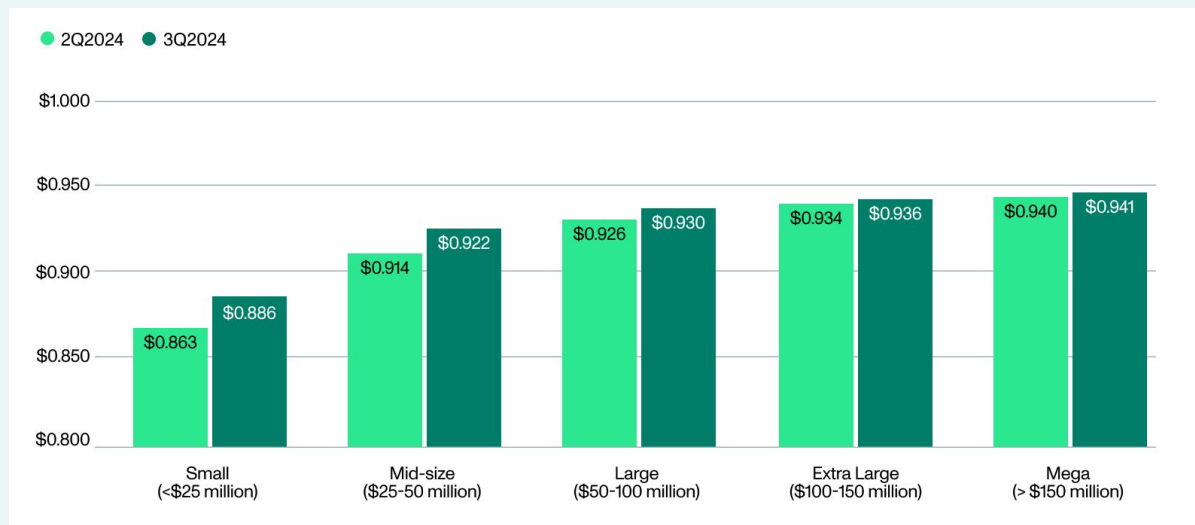
# 3Q24 solar ITC pricing increased, with notable lift for small and midsize projects

Large solar ITC deals (including portfolios) typically see 93-94 cents.

Solar ITC deals have seen modest price improvement, with notable increase for small and midsize projects.

Often insured, buyers are typically mindful of recapture, basis, qualification/eligibility, and structure.

Quarter over quarter average solar ITC pricing





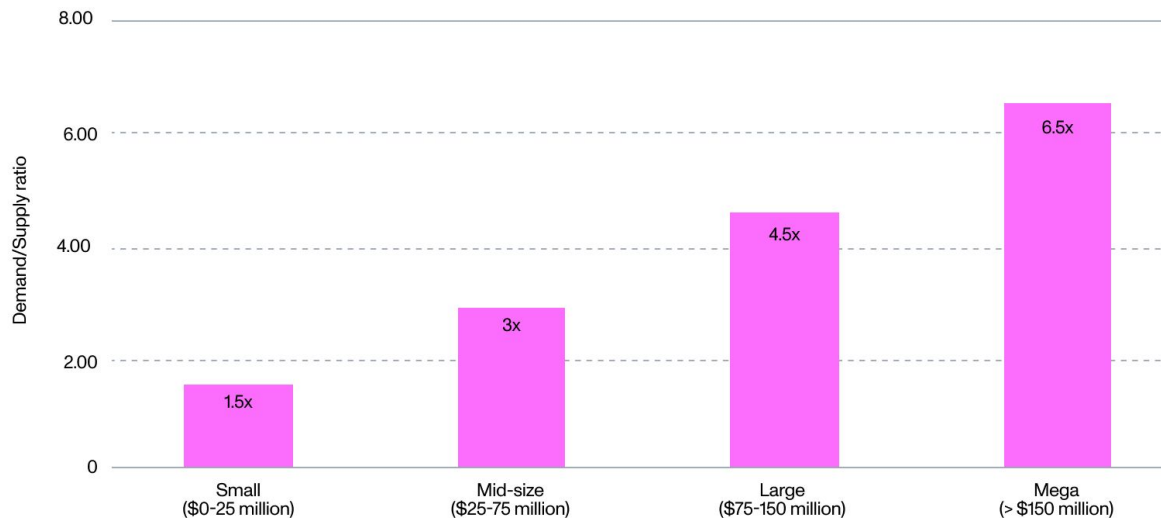
# Looking ahead, demand remains robust, especially for larger deals

Project developers and manufacturers want to know how deep and liquid the tax credit market is.

Crux has observed that demand is robust across deal sizes, but especially as deals get larger (reflecting an influx of large buyers).

Credits receive, on average, 2-4 bids per listing.

Market depth, multiples of listed credits, by deal size tranche





# Any questions?

Get in touch by visiting [cruxclimate.com](https://cruxclimate.com) or emailing [partnerships@cruxclimate.com](mailto:partnerships@cruxclimate.com)





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