News and analysis from The Wall Street Journal and across Dow Jones

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- Automakers scramble to get into mining
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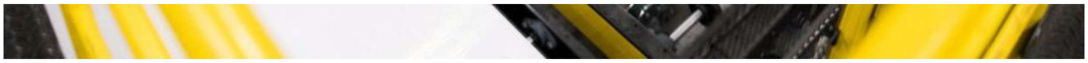
- Microsoft bets on fusion power

The New Green Tax Breaks Are Gradually Becoming Clearer

By Ed Ballard



New Treasury guidance lays out domestic-manufacturing requirements for renewable energy. A First Solar plant in Perrysburg, Ohio.
PHOTO: MEGAN JELINGER/REUTERS

The big winners, and some losers, are starting to emerge as the Biden administration sets rules for its climate-focused tax-break bonanza.

With each decision by the Treasury Department, the future of U.S. clean energy takes shape. The Inflation Reduction Act seeks to cut emissions while creating jobs and building industries. To that end, certain credits are tied to the use of domestically produced equipment.

When those made-in-America rules for renewable-energy projects were released last week, the impact was immediately clear. Shares of First Solar, the biggest U.S. solar panel manufacturer, jumped nearly 25% to their highest level since 2008.

The rules require that 40% of a solar panel's components, by value, be domestically produced. That allows continued reliance on imports for basic materials such as solar wafers, which nearly all come from China.

That should let more projects access the credits, which in turn should boost demand for First Solar's panels. Some manufacturers sought tougher rules to incentivize more investment in the U.S. supply chain, but that would likely have slowed the pace of new solar projects.

Bryan Alperin, a managing director at Foss, which advises on tax-credit deals, said he expects companies to push back against the requirement to pinpoint the value and origin of every component in a solar panel. Rules for how tax credits work are never truly settled, he said.

"The industry is accustomed to operating in varying levels of ambiguity," Alperin said.

All the same, he said the picture is gradually becoming clear enough for developers and investors to start counting on at least some of the new incentives. Here are some key questions that remain.

The Meaning of "Free Trade"

Guidance unveiled in March lays out how electric-vehicle buyers can tap up to $7,500 in credits for an EV that contains battery minerals that were extracted or processed in the U.S. or a country with a free-trade agreement. The rules ensured that many EV models are still eligible.

Treasury is taking comments on the rules, and Joe Manchin, the West Virginia Democrat who was crucial to the passage of the IRA, vowed to fight them, saying they don't do enough for U.S. manufacturing. He noted that the legislation doesn't define "free-trade agreement," complaining that hasty critical-minerals trade deals could let other countries benefit.

Hydrogen Recipes

The IRA promises cash for companies that make hydrogen fuel using machines called electrolyzers. But there's an argument over how to power them.

Some renewables companies want hydrogen suppliers to prove they are adding green electricity to the grid by matching hourly energy consumption to local renewable-energy purchases. Big energy companies including BP and NextEra want monthly or even annual matching. Tighter rules would increase costs; looser ones would undermine the benefit of "green" hydrogen.

Who Gets the Credit?

Renewables developers generally raise much of their finance from tax-equity investors, who get the tax credits as well as an equity stake. A few banks dominate the business.

To expand the market, the IRA lets projects sell credits to third parties, without complex tax-equity structures. The provision could open up more financing, especially for smaller projects. But key details, such as under what circumstances individuals will be able to buy the credits, are outstanding.

The IRA also lets tax-exempt investors receive certain tax breaks in cash, potentially spurring institutions like colleges and endowments to fund renewable projects. But how many do so depends on how onerous the process is. Officials will need to check that they aren't writing checks to nonexistent wind and solar facilities. But if legal costs get too high, investors will steer clear.

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In the News

GM struck a deal that gives it exclusive rights to lithium extracted from a desert site in Nevada called Thacker Pass.
PHOTO: BRIDGET BENNETT FOR WSJ

Automakers scramble to get into mining. As warnings of a battery-metal shortage grew louder, auto executives realized they needed to share the cost of closing the supply gap. They're using their deep pockets to get mines up and running. Read more.

Why carbon capture is hard. Power plants are relying on the technology to meet new Environmental Protection Agency emissions limits, but high costs and teething problems at the only commercial facility in North America show it won't be easy. Read more.

Microsoft bets on fusion power. The tech giant struck a pioneering deal to purchase electricity from startup Helion Energy within about five years—not long, given that many experts say fusion could be decades away. Read more.

- Honeywell Builds Plant to Make Jet Fuel From Repurposed CO2 (MarketWatch)
- Driving an EV Is Getting Greener, Especially in the U.S. (WSJ)
- GM, Ford Could Have Trouble Selling EVs at a Profit (Barron's)

- California’s Green-Fuel Program Gets Too Popular for Its Own Good (WSJ)

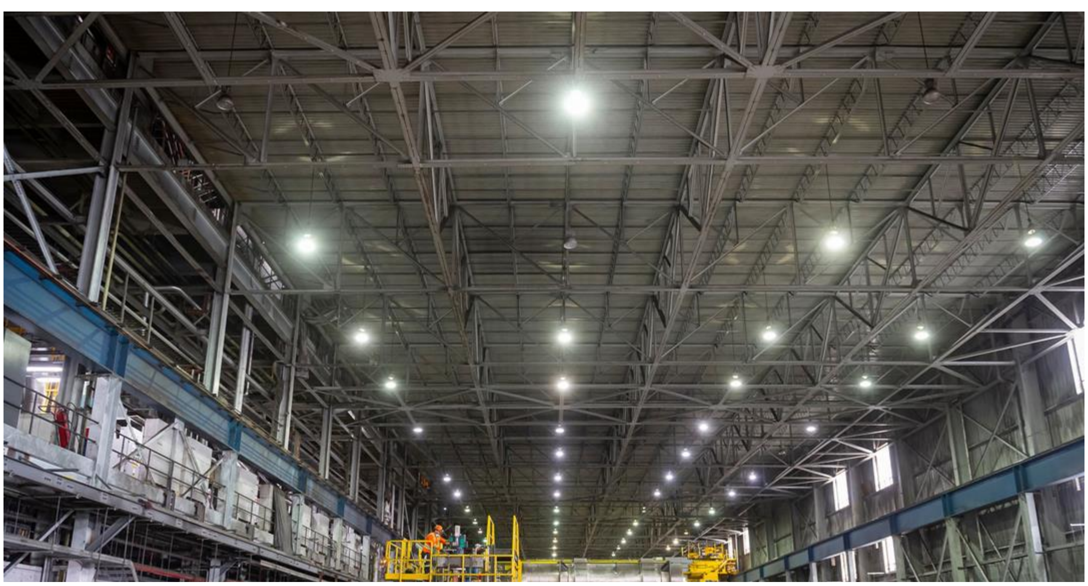
The Wall Street Journal’s Evan Gershkovich is being wrongfully detained in Russia after he was arrested while on a reporting trip and accused of spying—a charge the Journal and the U.S. government vehemently deny. Follow the latest coverage, sign up for an email alert, and learn how you can use social media to support Evan.

Quoted

“We said, ‘We want all of it.’”

— Sham Kunjur, who oversees GM’s efforts to secure battery minerals, on negotiations with a lithium miner in Nevada.

The Climate and Your Money



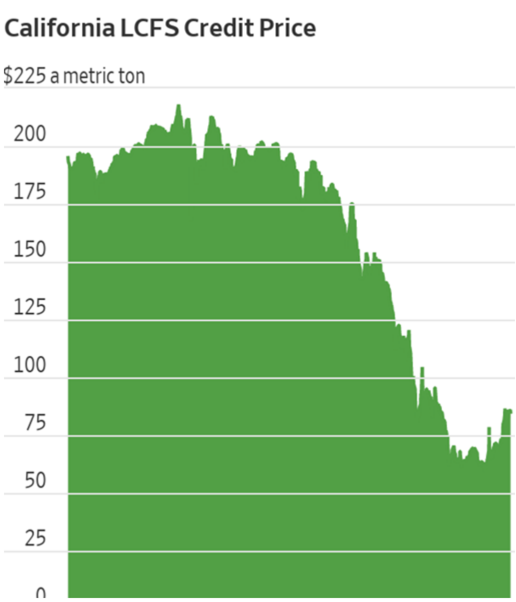
Only one commercial power plant in North America is currently operating with carbon capture: the Boundary Dam Power Station in Saskatchewan.
PHOTO: CHRIS HENDRICKSON FOR WSJ

🏭 Providers of carbon-capture systems stand to gain from the Environmental Protection Agency's plan to limit emissions from power plants, Avi Salzman writes for Barron's. The list of technology suppliers includes oil major Shell; industrial-gas suppliers Air Liquide, Linde and Air Products & Chemicals; and industrial-equipment maker Chart Industries.

🔧 With fewer failure-prone mechanical parts, the rise of EVs might seem like a bummer for your local mechanic or auto-parts shop. But even if oil change and air-filter replacements become a thing of the past, there will still be repair jobs, Jinjoo Lee writes for Heard on the Street. For instance, batteries will need replacement cooling gear. The beneficiaries could be auto dealers that can afford to invest in training and new equipment.

The Data Point

California's Green-Fuel Program Gets Too Popular for Its Own Good



U.S. production of renewable diesel, made from feedstocks such as beef tallow and soybean oil, has surged thanks to federal incentives and California's Low Carbon Fuel Standard. Now, the boom has tanked the market for California's low-carbon fuel credits, hitting producers across the country, Bob Henderson reports for WSJ. Prices are down by more than half their value since the start of 2021,

Source: OPIS

according to [OPIS](), an energy-data provider owned by Dow Jones.

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