Inflation Reduction Act & Schools: New federal funding for healthy, sustainable, **cost-effective schools in Maryland** December 4, 2023

Who we are

4UNDAUNTEDK12

Our mission is to support America's K-12 public schools to make an equitable transition to zero carbon emissions while preparing our youth to build a sustainable future in a rapidly changing climate.



How we work

Awareness building



Policy development & advocacy



Coalition building



Thought leadership

HVAC Choices for Student Health and Learning

What Policymakers, School Leaders, and Advocates Need to Know



Noto by Allison Shelley/The Verbatim Agency for EDU images

Report / January 2023

New web resources for the Inflation Reduction Act

*4***UNDAUNTEDK12**

Inflation Reduction Act Our Latest Where We Work In the News Solutions Center About in 🈏 🌀

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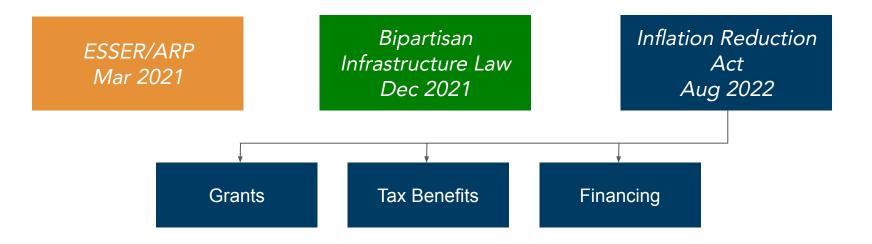


The <u>Inflation Reduction Act</u> (IRA) is the largest **investment in climate and clean energy in United States history**. Billions of dollars are now available to schools for going green.



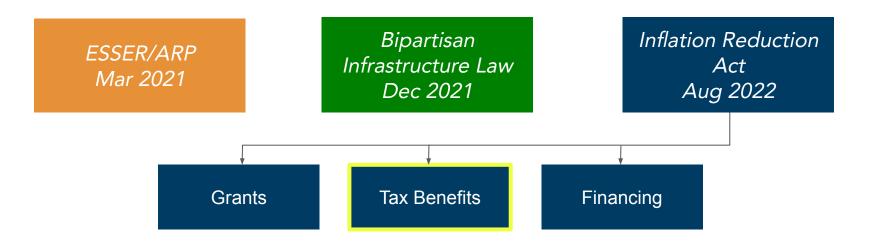
https://www.undauntedk12.org/schools-and-the-ira

The context for IRA funding





Largest opportunity (available today) is the tax benefits





What's so special about the IRA's tax credits?

Non-competitive

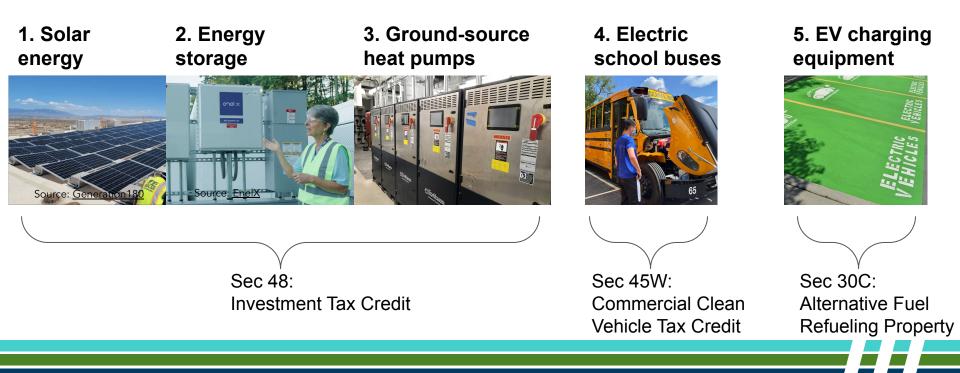
Cash reimbursement

Available until 2033+

Unlimited funding



Tax credits available for this clean energy equipment



Let's work through an example: ground-source heat pumps

A quick orientation to heat pumps as a "better mousetrap" for your school buildings.

Oil/gas boiler Heat pump No on-site fossil-fuel combustion Burns fossil fuels on-site ~87% efficient ~200%-600% efficient Need additional system for cooling Provides heating and cooling Can operate using low-cost, fixed-cost solar energy

What is the amount of my credit?

Cost Basis \$ x Rate % x Reduce for Tax-Exempt Financing % =

Value of Investment Tax Credit



Determining the cost basis. We have experience.

IRS Guidance

Notice 2018-59

"Geothermal Heat Pump Property - On-site physical work of a significant nature may include the installation of ground heat exchangers, heat pump units, or air delivery systems (ductwork)."

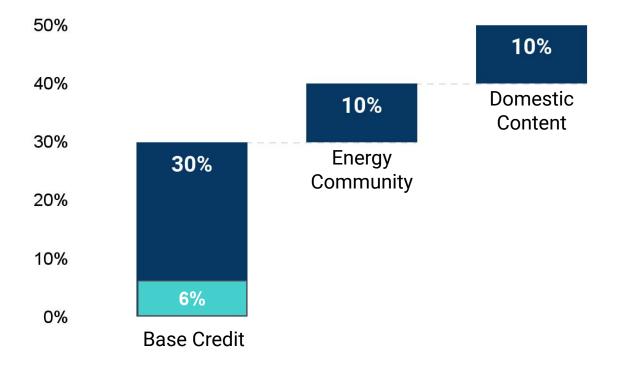
From Industry Association based on past experience of members:

Federal financial incentives include every part of the mechanical systems required to make a complete package including wells, distribution piping, electrical, controls, heat pump equipment, all required peripherals (pumps and VFD's, etc.) and labor.



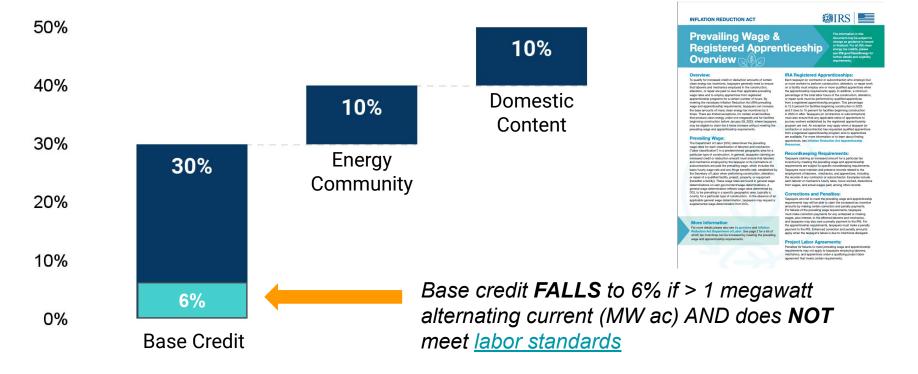
Determine relevant costs from HVAC, plumbing and electrical scopes based on past guidance and experience.

Understanding the project's rate. Bonus credits may apply.

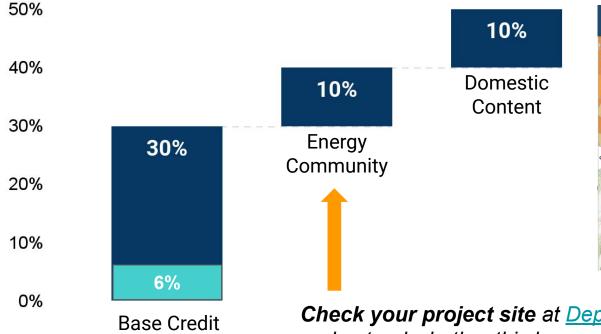




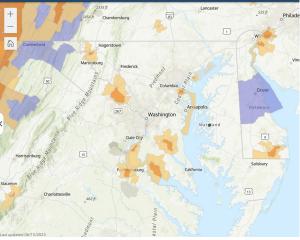
Know the 1 MW test & implications for labor standards



Check your site location for the "energy community" bonus

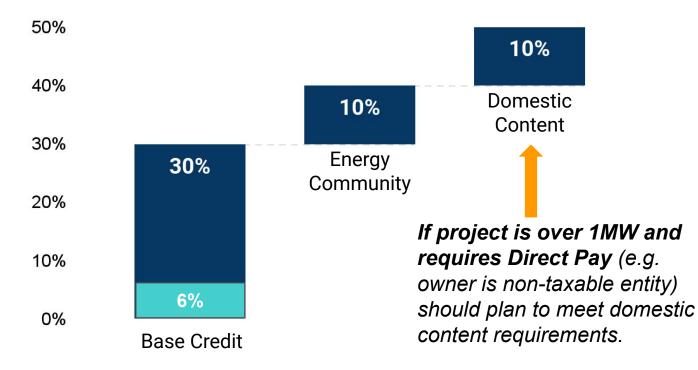


Energy Community Tax Credit Bonus



Check your project site at <u>Dept of Energy</u> to understand whether this bonus credit applies

Domestic content will be critical if over 1 MW





Adjust the rate if using tax-exempt bonds

Example:

(30% + 10%) = 40% less 15% = 34%Base credit Domestic Content adder Tax-exempt bonds

"To the extent that a project is financed with tax-exempt debt and eligible for the PTC or ITC, the amount of the tax credit is reduced by the lesser of (i) 15% or (ii) the portion of the qualifying project that has been financed with tax-exempt debt. Because this is a "lesser of" test, this allows such projects to be financed 100% with tax-exempt debt, while only reducing the direct pay tax credit by 15%."

Source: JDSupra, "Inflation Reduction Act Levels Renewable Energy Playing Field for Tax-Exempt Entities" August 26, 2022

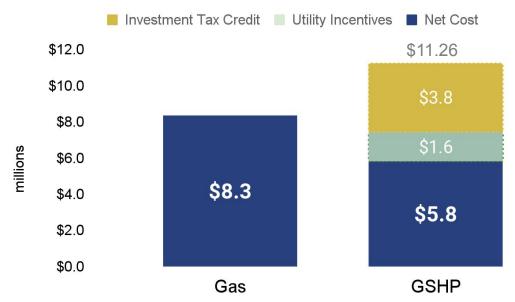
Estimated value of IRA tax benefits for a K-12 school project in MA

	Basis	x Rate	= Estimated value
Tax credit for ground-source heat pumps*	\$11,264,869	34%	\$3,830,055
Tax credit for solar	\$2,310,000	25.5%	\$589,050
Tax credit for energy storage	\$500,000	25.5%	\$127,742
Total estimated tax benefits			\$4,546,847

* This project assumes a 280-ton GSHP systems which converts to less than 1MW-ac so project is *exempt* from labor standards and needing to meet domestic content requirements for purposes of using Direct Pay. Regardless, project plans to meet domestic content for the GSHP system and to therefore collect the 10% adder.

New incentives in context

Cost estimates for HVAC system installation w incentives (Gas vs Ground-Source Heat Pump)



Note: This example is for a new school construction project in Massachusetts where certain utility rebates are also available.

What is Direct Pay (aka Elective Pay)?

The IRS mechanism through which non-taxable entities (like schools!) convert tax credits to cash reimbursements.



INFLATION REDUCTION ACT



https://www.whitehouse.gov/cleanenergy/directpav/

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Elective () Pay Overview	The answers to the questions have an based on proposed and temporary sections any not insertinglikly proposed and temporary applications of the memory based on may charge a when these majoritions are finalized balancing actions commercipation. You may also shoose to crowall with the white:	State & Local Governments
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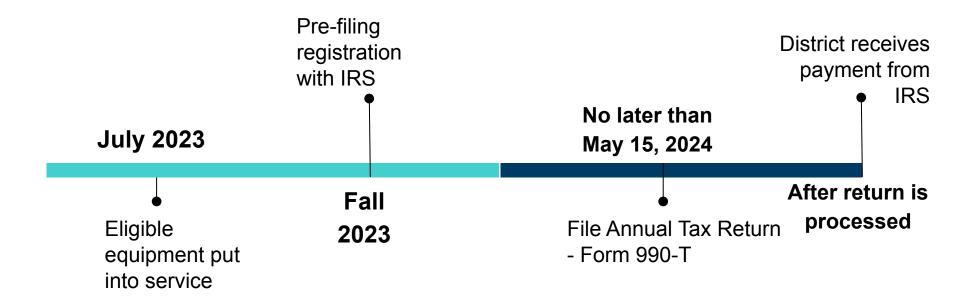


5. File Form 990-T by the due date (or extended due date) and make a valid elective payment election

What tax credits can elective pay be used for? Sas Dublication SETTS for a lat of tax cardia that can be used for elective pay > Flective Pay and Transferabil

https://www.irs.gov/pub/irs-pdf/p5817e.pdf

When will the equipment owner receive payment?



Where do you go from here?

Laying the groundwork

- Put together your IRA team
- Learn and share about the IRA with your team
- □ Identify a budget for professional services
- Review "<u>energy communities</u>" map for your district



"Get what you got"

Evaluate current projects for credits

"Apply the new rules of the road"

Re-evaluate current projects for clean alts

"Take another look"

Strategic planning and preparation

"New business as usual"

Integrating incentives into costs at all levels

First Costs

Ensure incentives are accurately incorporated in budgets and cost estimates

Lifecycle Costs

Analyze opportunity to operate electric machines at low- and fixed-cost using solar energy

Societal Costs

Include "social costs of carbon" in financial analyses to future-proof decision-making in an evolving regulatory landscape.

Future-proofing essential in rapidly changing environment

First Costs

Ensure incentives are accurately incorporated in budgets and cost estimates

Lifecycle Costs

Analyze opportunity to operate electric machines at low- and fixed-cost using solar energy

Societal Costs

Include "social costs of carbon" in financial analyses to future-proof decision-making in an evolving regulatory landscape.

 Common practice in Fortune 500
Boston BERDO Ordinance -Alternate compliance fee \$234/ton

New York State using \$126/ton (\$54 to \$414)

TELL US about a school project in your community that will leverage the IRA

Complete this quick form: https://forms.gle/UYfWVjKLigaL7V8d9



Want more on IRA and zero energy buildings?

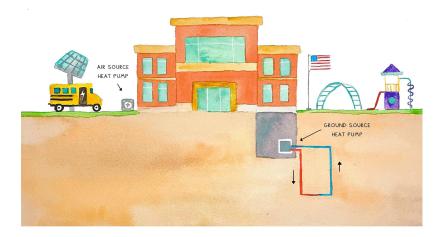
Inflation Reduction Act

- <u>Schools and the IRA</u> including <u>5 Actions to Get Started</u> our web resources
- <u>Schools Can Use These Little-Known, Unlimited Funds...</u> Article in EdWeek
- Inflation Reduction Act 90-min webinar from Eversource's Zero Energy Buildings Conference

HVAC System Choices / Ground-Source Heat Pumps

- <u>HVAC Choices for Student Health & Learning</u> report with RMI for non-technical audiences
- Ground Source Heat Pumps Eversource Zero Energy Buildings Conference
- <u>Making Climate Smart HVAC Investments</u> webinar in partnership w AASA

COOL SCHOOLS HAVE HEAT PUMPS



Questions?

Sarah Heine sarah.heine@undauntedk12.org

Thank you!

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Appendix A: Next steps for taking action

Claim credits for completed 2023 projects

- 1. Discuss IRA opportunities with all relevant project managers, designers, CM's, and vendors
- Review recent work to identify all qualifying clean energy equipment put into service in 2023
- 3. For each piece of 2023 qualifying equipment, gather relevant documentation (e.g. size, location, relevant bonus credits)
- 4. Estimate the value of clean energy tax credits
- 5. Clarify treatment of expected revenue with relevant parties
- 6. Complete pre-filing with the IRS in Fall 2023 for each qualifying equipment
- 7. File your 990-T with the IRS before May 15, 2024
- 8. Consider hiring a tax professional with renewable energy tax credit experience (*likely **not** your current tax professional)

Evaluate current projects for credit eligibility

- 1. Review current projects to identify all qualifying clean energy equipment planned in current projects
- 2. Understand where your projects falls against 1 MW test
- 3. Understand whether your project is located in an energy community
- 4. Understand what role labor standards and domestic content are likely to play in your project
- 5. Discuss IRA opportunities with all relevant project managers, designers, CM's, and vendors
- 6. Estimate the value of credits for current
- 7. Include appropriate language related to IRA provisions (e.g. domestic content, labor provisions) in project documents (e.g. RFQs)

Re-evaluate current projects for clean energy alts

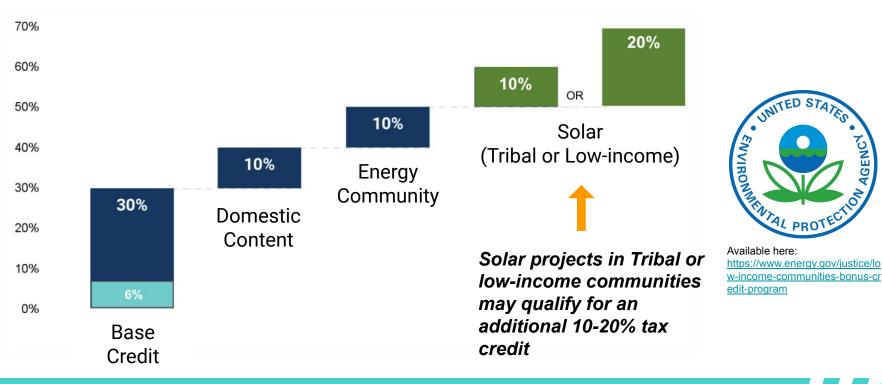
- 1. Discuss IRA opportunities with all relevant project managers, designers, CM's, and vendors
- Determine what current projects could be enhanced with clean energy equipment? (e.g. ground-source heat pumps rather than gas boiler? add solar? energy storage?)
- 3. Explore opportunity for tax credits on one piece of clean energy equipment unlock additional investment maybe even in additional clean energy? (e.g. tax credit on GSHP can pay for solar)
- 4. Discuss implications of potential changes with utility partners
- 5. Understand what new incentives for clean energy equipment from other sources may exist? (e.g. geo-REC, 5% for net zero, MEA grants)



Appendix B: Additional detail on clean energy tax credit provisions



Solar projects may qualify for an additional 10-20% low income bonus



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Commercial Clean Vehicle Credit (Sec. 45W) for ESB

Amount: Up to \$40,000 which is lesser between:

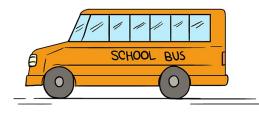
- 30% of the cost of an electric school bus <u>OR</u>
- The incremental cost between an electric and a diesel school bus

Can be combined with other funding: including other tax exempt grants and loans, such as funding from the EPA Clean School Bus Program

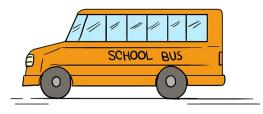
- Funding from grants and loans will be considered income that impacts total tax credit
- The sum of the [tax credit] + [tax-exempt funding] cannot exceed the total cost of the ESB



Illustration of third-party money



Both school buses are priced at \$400,000 (meaning that \$400k is the cost basis)



\$400,000 - GRANT + \$40,000 - 45W TAX CREDIT

\$440,000 - exceeds cost basis

*tax credit reduced to \$0

\$300,000 – GRANT + \$40,000 – 45W TAX CREDIT + \$100,000 – other unrestricted funds

\$340,000 – less than cost basis

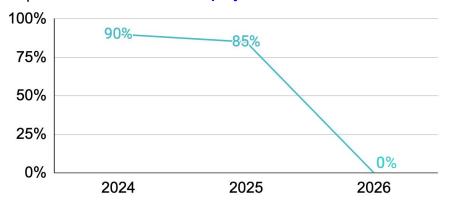
*tax credit not reduced

Electric School Bus

Domestic content & Direct Pay

For projects over 1MW that commence construction in 2024 or later, meeting the domestic content thresholds will be required to receive the full amount of the credit through Direct Pay.

Percent of Direct Pay payment received if domestic content requirements not met and the project is > 1MW-ac



Making Clean Energy Tax Credits Deliver for the Public: A User Guide for Governments, Schools, and Nonprofits

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-for-governments-schools-and-nonprofits/

Year of Commence Construction

Appendix D: Understanding project dates



Two key concepts for understanding project milestones

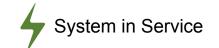
Commence Construction

Two pathways:

- Physical Work Test
- Five Percent Safe Harbor

plus continuity of work.

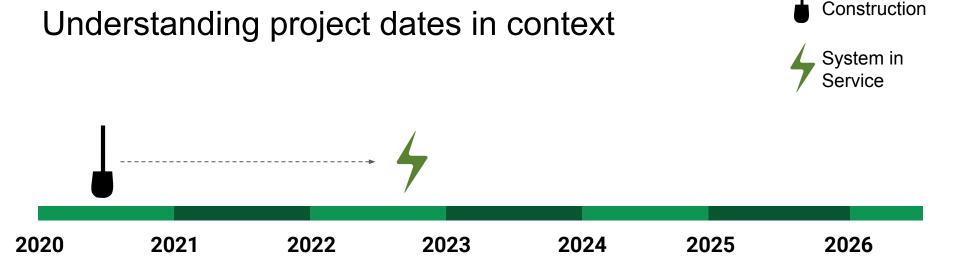
Read details at: IRS Notice 2018-59



When the property is ready and available for use.

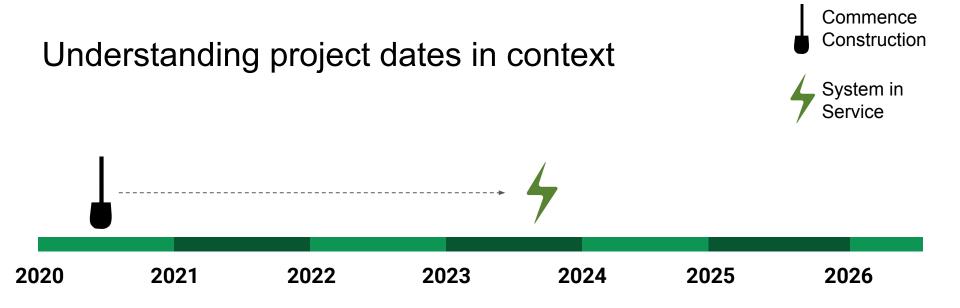
Consult counsel on these generally understood interpretations:

- For solar, date of energization
- For ground-source heat pump, system commissioning is complete

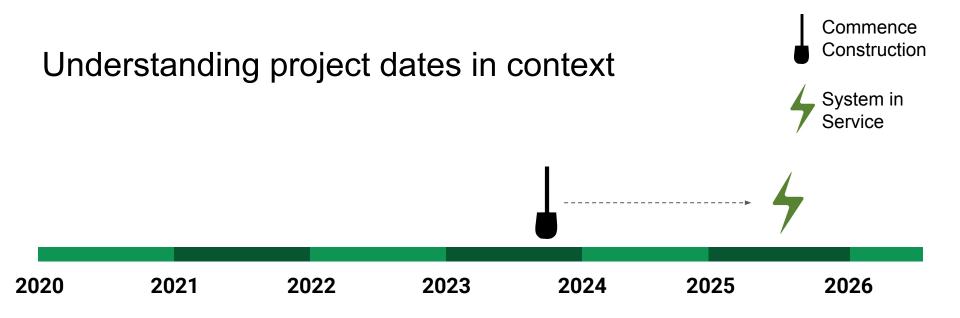


→ System put into service prior to January 1, 2023 so **not eligible** for Direct Pay.

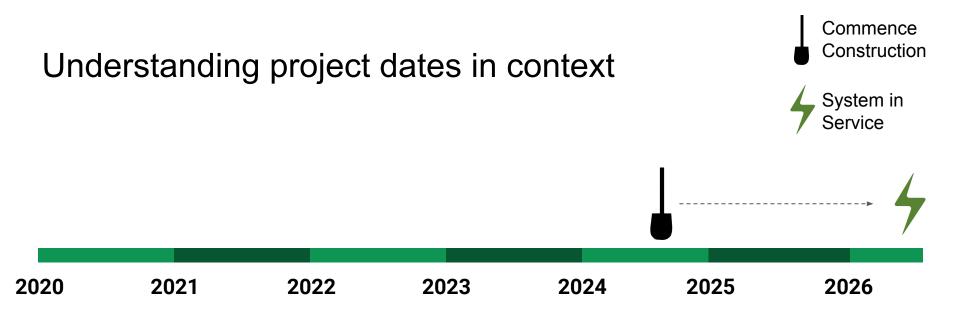
Commence



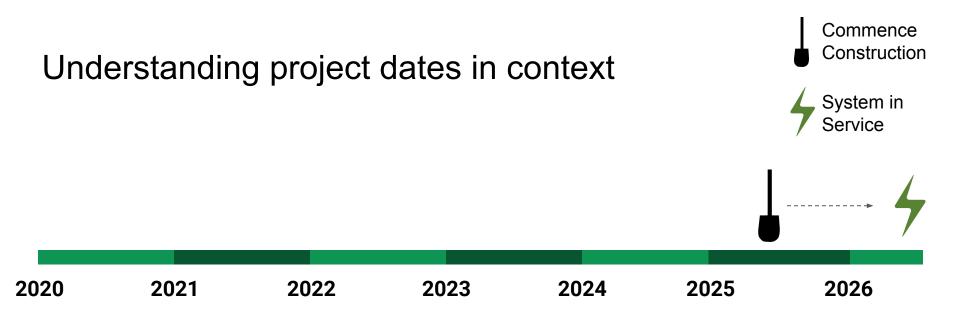
- → System put into service after January 1, 2023 so non-taxable entity is eligible for clean energy tax credits payable through Direct Pay.
- → The value of tax credits is **not** impacted by the labor provisions because the project commenced construction before <u>January 29, 2023</u>.



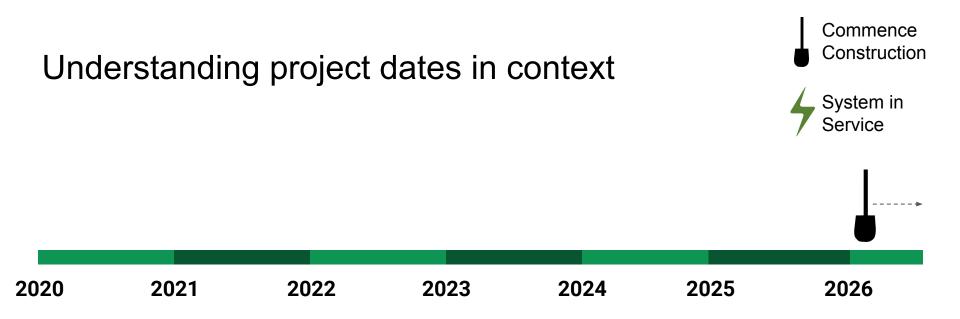
- → System put into service after January 1, 2023 so non-taxable entity is eligible for clean energy tax credits payable through Direct Pay.
- → If greater than 1MW, the value of the tax credits will be impacted by labor provisions because the project commenced construction after January 29, 2023.
- → Because the project commenced construction in 2023, failing to meet domestic content will not reduce the expected tax credits. The 10% domestic content adder is available.



- → System put into service after January 1, 2023 so non-taxable entity is eligible for clean energy tax credits payable through Direct Pay.
- → If greater than 1MW, the value of the tax credits will be impacted by labor provisions because the project commenced construction after January 29, 2023.
- → If the project does not meet domestic content provisions, it will only receive 90% of the expected tax credit through Direct Pay because it commenced construction in 2024.



- → System put into service after January 1, 2023 so non-taxable entity is eligible for clean energy tax credits payable through Direct Pay.
- → If greater than 1MW, the value of the tax credits will be impacted by labor provisions because the project commenced construction after January 29, 2023.
- → If the project does not meet domestic content provisions, it will only receive 85% of the expected tax credit through Direct Pay because it commenced construction in 2025.



- → System put into service after January 1, 2023 so non-taxable entity is eligible for clean energy tax credits payable through Direct Pay.
- → If greater than 1MW, the value of the tax credits will be impacted by labor provisions because the project commenced construction after January 29, 2023.
- → If the project does not meet domestic content provisions, it will only receive 0% of the expected tax credit through Direct Pay because it commenced construction in 2026.