



Asset management plans, project funding and Inflation Reduction Act

Joint Utility Management Seminar
October 2, 2024

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A black and white photograph of a city skyline at night, featuring several tall buildings and a prominent sign for 'JW MARRIOTT' on one of the structures. The image is partially obscured by a teal banner at the top and a white text area in the middle.

Agenda

- Introduction to current economic environment
- A dive into federal funding opportunities
 - American Rescue Plan Act of 2021 (ARPA)
 - Infrastructure Investment and Jobs Act (IIJA)
 - Inflation Reduction Act (IRA)
- Next steps
- Reminders and helpful resources



Capital planning and asset management

Capital asset planning

- Critical element of long-term financial stability
- Multi-party involvement is key
- Major projects, major repair/replacement plan and allowance for improvements and rolling stock
- Utility infrastructure is aging
 - Life cycle of assets
 - End of life replacements
- Timing of projects needed
- Cost of projects
- Consideration of funding options
 - Cash on hand
 - Lease capital needs such as trucks, meters, software system upgrades
 - Bond financing



Capital plan example

Project	2023	2024	2025	2026	2027	Total
Ammonia limits on NPDES permit renewal	\$1,000		\$1,000		\$2,000	\$4,000
Lab equipment	1,000	\$3,000	2,500		3,000	9,500
Camera van replacement			40,000			40,000
New pickup				\$50,000		50,000
Clean lagoon No. 1	150,000					150,000
Lift station upgrade	10,000					10,000
Lift station maintenance		15,000		20,000	5,000	40,000
Lining of sewers	40,000		20,000	40,000		100,000
New vactor truck		150,000	200,000			350,000
Blowers		5,000		10,000		15,000
Lift station pumps		10,000	20,000			30,000
Chemical holding tank	20,000				5,000	25,000
Sewer camera replacement		40,000				40,000
Total estimated capital improvements	\$222,000	\$223,000	\$283,500	\$120,000	\$15,000	863,500
Divided by: 5 years						5
Average annual capital improvements						\$172,700



The challenges

- Managing increasing operating expenses
- Meeting infrastructure needs
- Addressing declining cash reserves
- Future does not always go as planned



Asset management plan (AMP)

- **AMPs required by SRF to issue debt**
- **Systematic approach**
 - For acquiring, operating, maintaining, upgrading and disposing of assets
- **Benefits**
 - Helps minimize unnecessary expenses (reactive maintenance or repairs)
 - Extends the useful lives of assets
 - Risk reduction (asset failure)
 - Data driven decision making
 - Optimized resource allocation – high priority projects
- **Engineering and financial component**
 - Engineering: asset replacement schedule for all existing utility assets
 - Financial: 20-year financial outlook supports the asset replacement schedule

Tolerance for risk

- Reluctance to increase rates to build cash reserves
- Willingness to finance capital needs and pay interest costs
 - Unexpected asset failure
 - Regulatory compliance
 - Capital improvement plan
- Willing to accept operating risks related to revenue and expense variability



Current inflationary environment

- Utilities in general have been particularly hard hit by rising costs driven by supply chain issues, availability and changing regulations
- Although general inflation is decreasing many of the areas that matter most to utilities are still volatile



Consumer Price Index – last 20 years

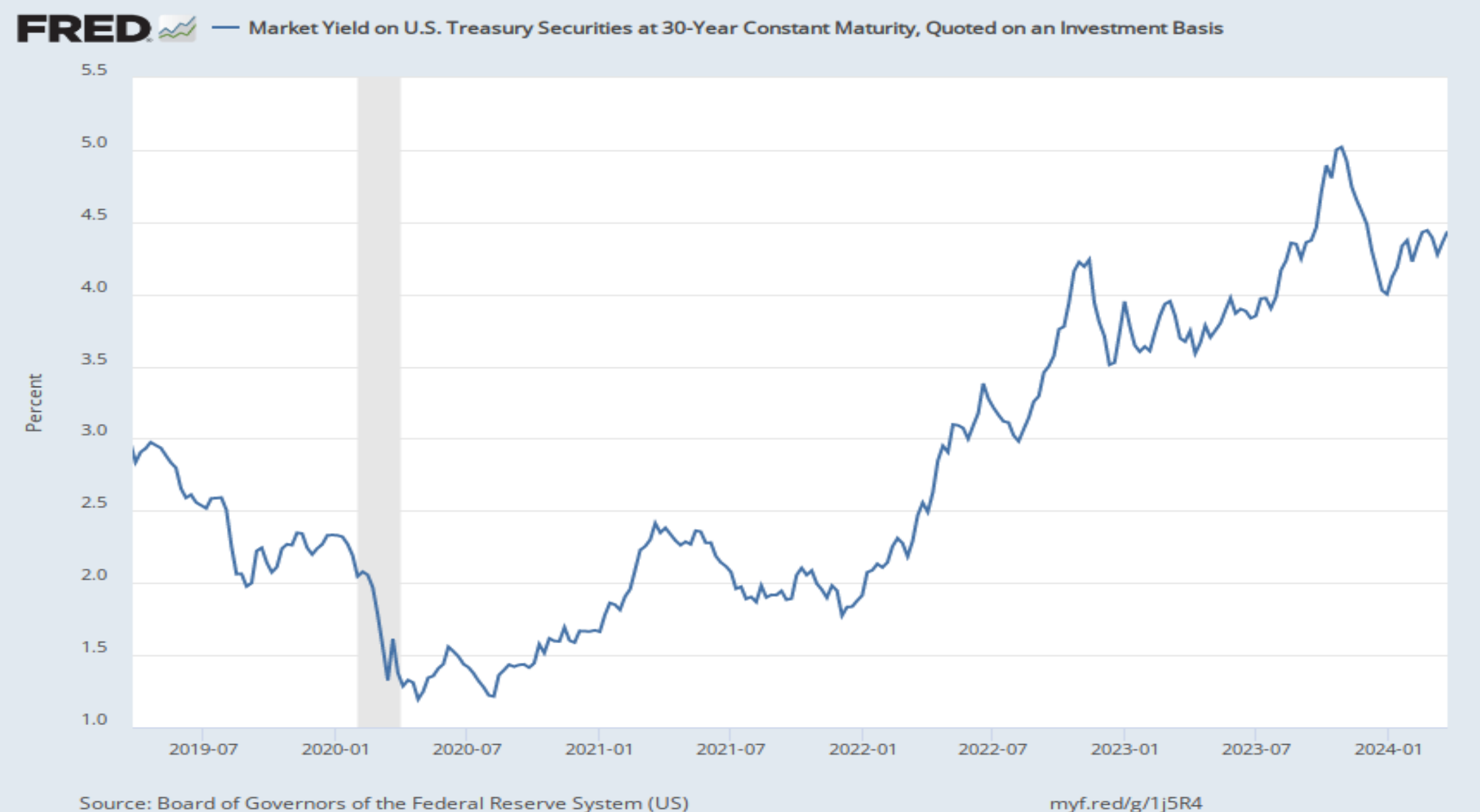
12-month percentage change, CPI, selected categories, not seasonally adjusted



Source: U.S. Bureau of Labor Statistics



Market interest rates





Indiana utilities

Our Indiana comparative rate studies* show average increases from Dec. 2018 – Dec. 2021 of:

- Water: 10.6%
- Sewer: 5.2%

**Released April 2022 by Baker Tilly Municipal Advisors – Updates in planning stage.*

Indiana utilities (cont.)

- While the average of these trended with overall inflation data, there's often a small lag in utility rate adjustments vs. inflation due to:
 - Requirement of Board/Council action
 - Rate adjustment driven by project needs
 - Time for inflationary increases in costs to pass through to the utility's bottom line and through cash reserves
 - Hesitancy to raise rates for a necessary cost when constituents are facing high inflation in other areas

Indiana utilities (cont.)

- With so much federal funding currently available, many utilities are trying to push projects forward now
- This, along with supply-chain issues, has caused projects all over the state to come in materially over budget
- Facing such unprecedented levels of inflation, now more than ever it's important to consider options that may help fund projects or cover operating costs in a way that will mitigate rate impacts

UPDATES BASED ON TREASURY'S
FINAL RULE

American Rescue Plan Act of 2021 (ARPA)

Deadlines are right around the corner

State and Local Fiscal Recovery Funds (FRF) – ARPA direct allocations

Local governments have until Dec. 31, 2024, to obligate ARP FRF

ARP dollars must be fully spent by Dec. 31, 2026

Projects need to be identified next year and spending plans established

Maximize available funding opportunities from other ARP provisions (in addition to direct funding allocations)



H.R. 3684

Infrastructure Investment and Jobs Act (IIJA)

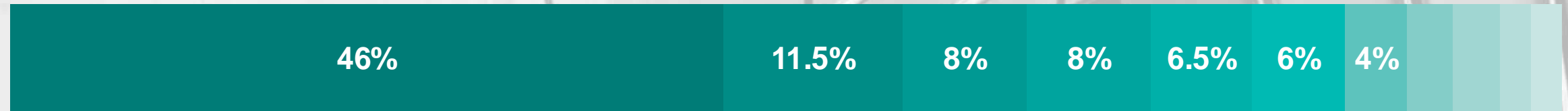
Review of IIJA

\$1.2 trillion bipartisan Infrastructure Investment and Jobs Act (IIJA) signed into law on Nov. 15, 2021

- \$550 billion of this is new funding
- \$650 billion is reauthorization of existing spending
- 5 years of funding (2022 – 2026) with +350 funding opportunities
- Also called Bipartisan Infrastructure Law (BIL)



IIJA funding breakdown over five years

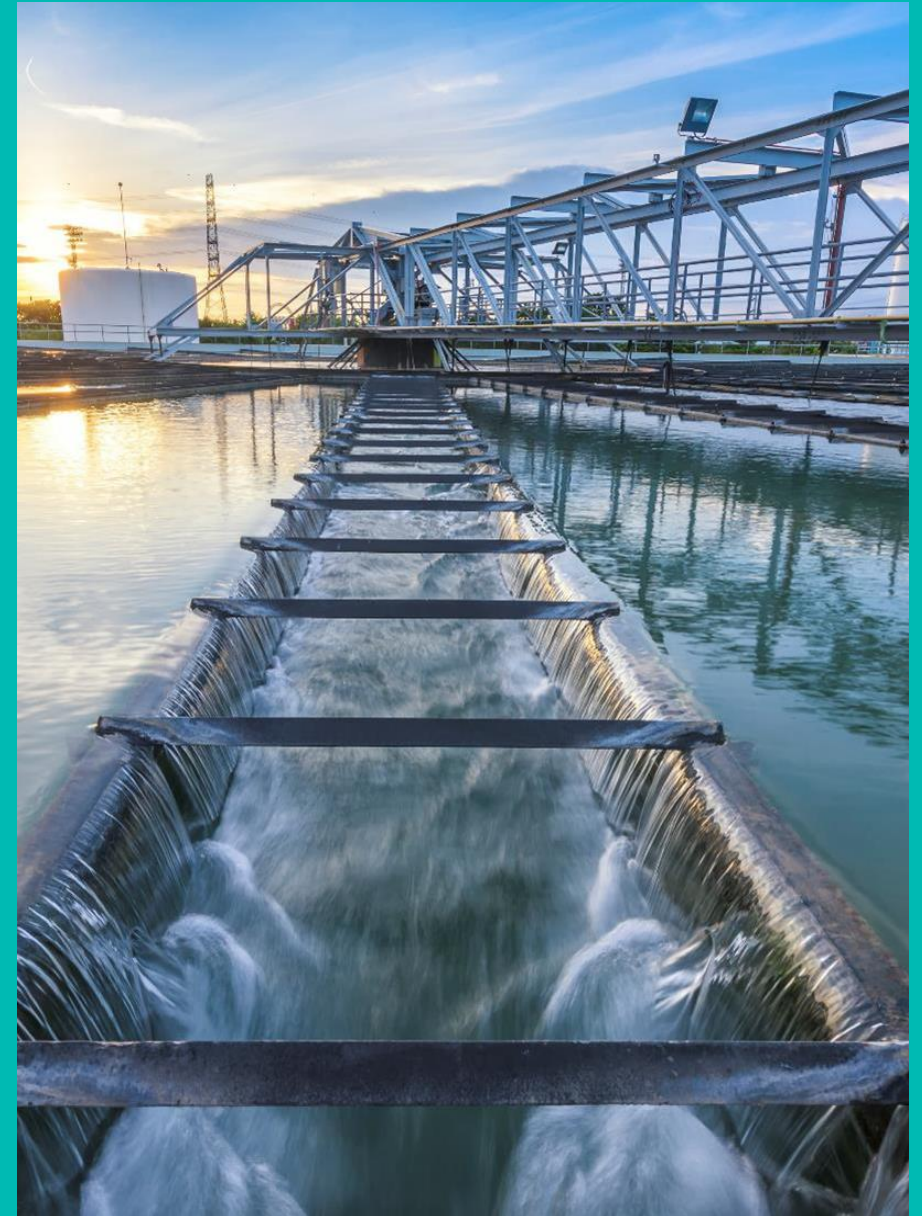


- 46% — Highway and bridges
- 11.5% — Transit
- 8% — Rail
- 8% — Broadband
- 6.5% — Energy grid, tech, supply chains
- 6% — Drinking and wastewater (stormwater)**
- 4% — Western water, wildfire management, dam safety
- 3% — Ports and waterways
- 3% — Aviation
- 2% — Economic development, public buildings, agency operations
- 2% — Mine/well cleanup, environmental remediation



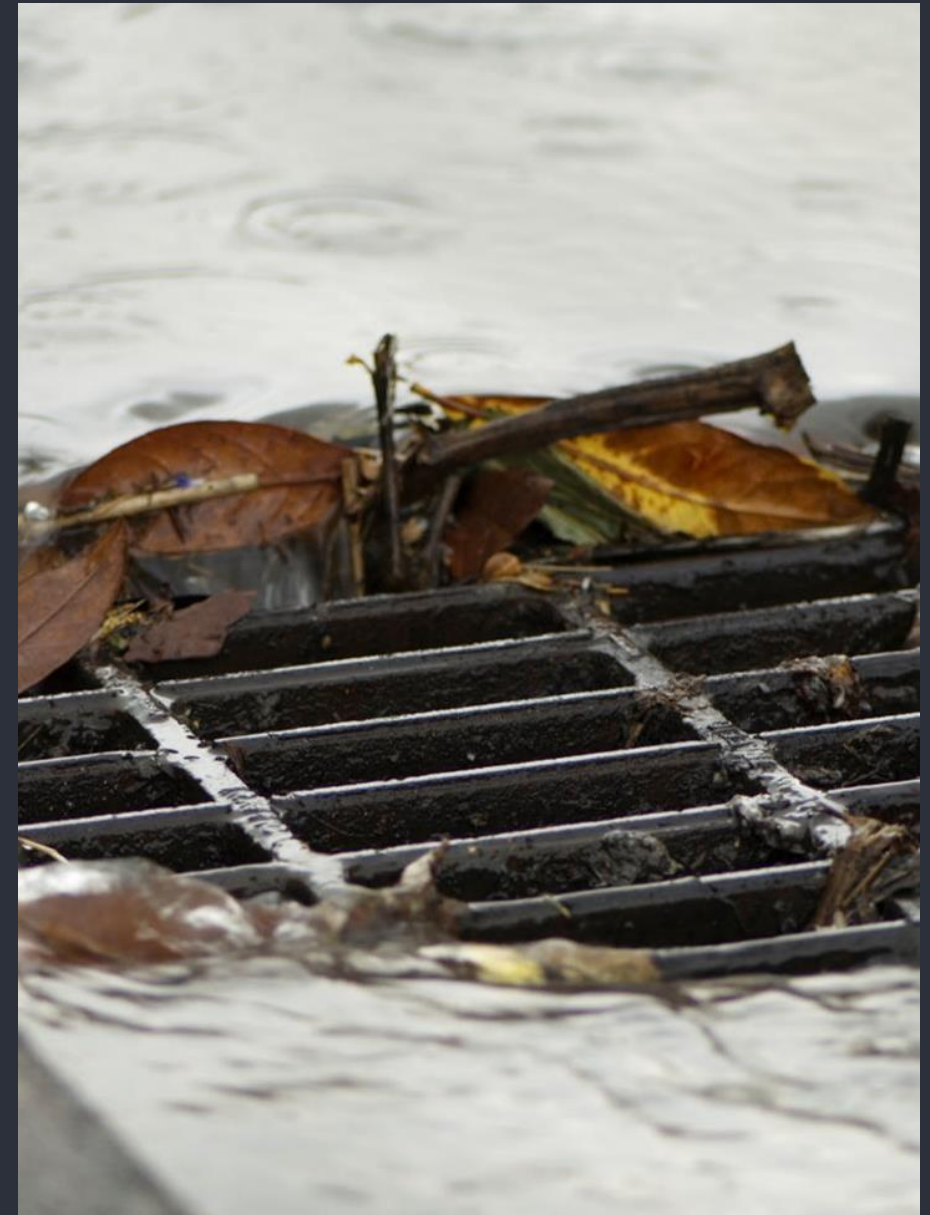
Drinking water

- \$14.65 billion (B) over five years
 - 2022: \$2.4B
 - 2023: \$2.75B
 - 2024: \$3B
 - 2025: \$3.25B
 - 2026: \$3.25B
- Small and disadvantaged community assistance
- \$15 billion lead pipe replacement
 - 49% grant
 - No state match
- Lead contamination in school drinking water \$30-\$50 million per year



Wastewater

- \$14.65 billion (B) over five years
 - 2022: \$2.4B
 - 2023: \$2.75B
 - 2024: \$3B
 - 2025: \$3.25B
 - 2026: \$3.25B
- Stormwater
- \$5 million per year for workforce training and development
- AWWA and EPA have issued guidance



State revolving funds (SRF) requirements

**All SRF requirements
will apply**

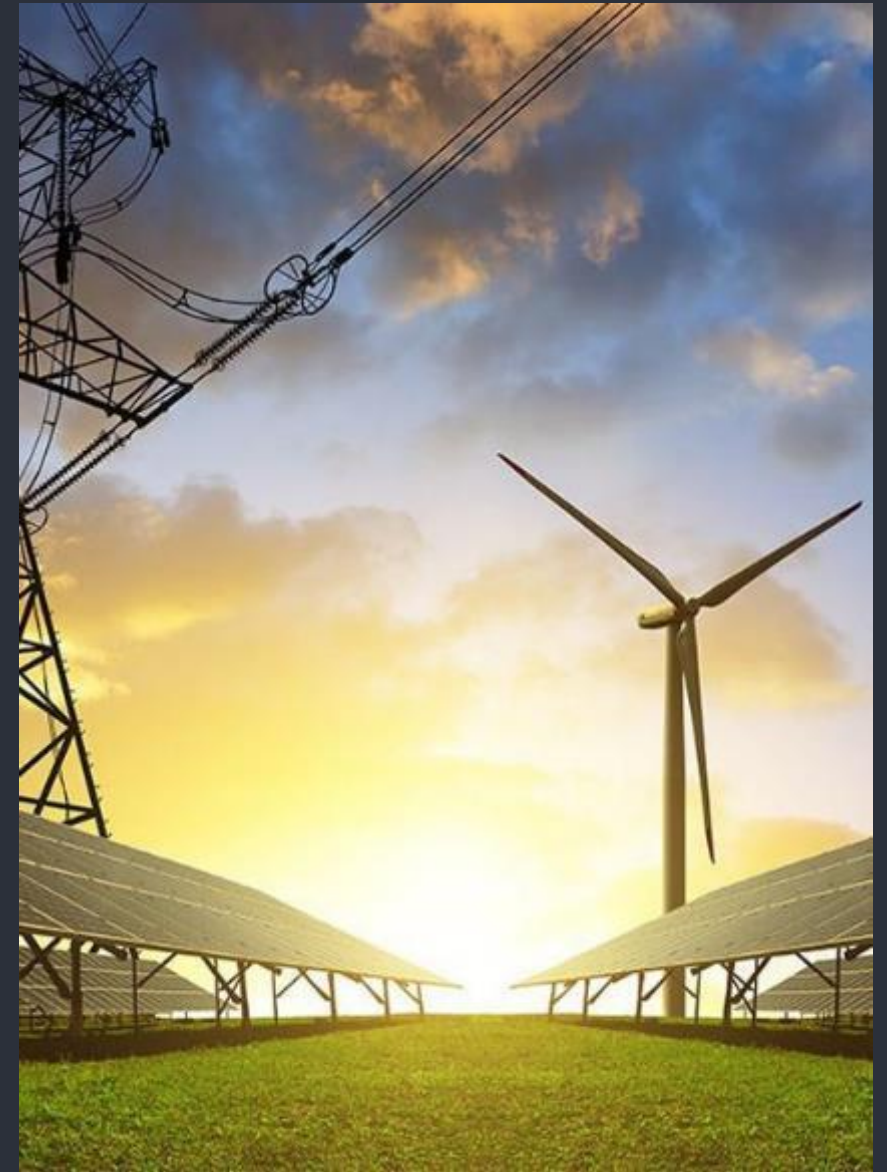
**Build America Buy
America Act
requirements will
apply**

**Dollars are available
for planning and
design**

**Focus on
disadvantaged
communities
especially for
principal forgiveness**

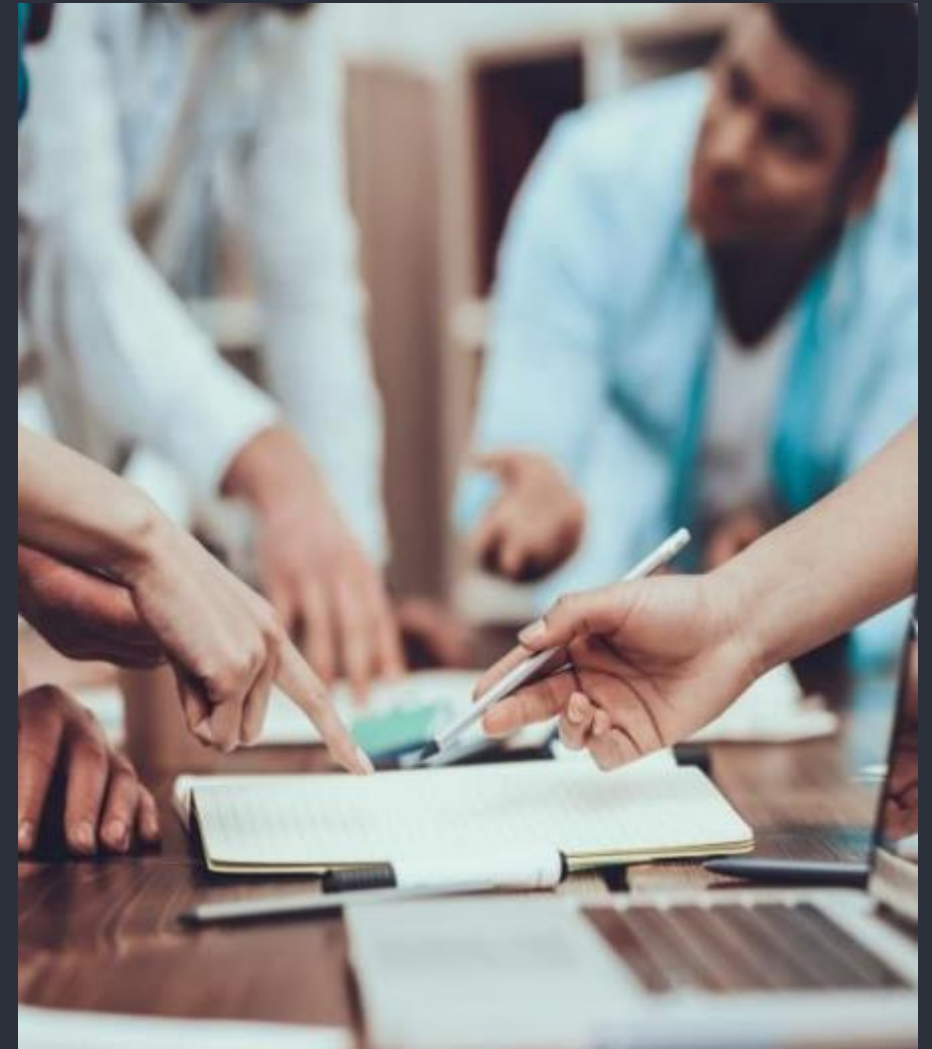
Energy Improvements in Rural and Remote Areas (ERA) Program

- Improve resilience, reliability and affordability of energy systems in communities across the country with $\leq 10,000$ people by:
- \$1 billion allocated to ERA over a 5-year period
- DOE has divided ERA funding into three different funding opportunities



Preparing for IIJA grants in a shifting landscape

- Timelines for grant rollouts can vary from projected dates and cycles; agencies may roll out similar programs back-to-back or combine FY cycles into a single opportunity
- Typically provide a 30-day to 90-day window between a full announcement and submission due date
- Large scale organizational planning is **KEY** for leveraging funding opportunities and mobilizing your team to build competitive proposals on short notice



Focus on IIJA priorities

Build America, Buy America Act

- Requires iron, steel, manufactured products and construction materials used in infrastructure projects to be produced in the U.S.
- Aggregates such as stone, sand and gravel wouldn't be covered
- Permits waivers to the "Buy America" preference if there are insufficient supplies or meeting the requirement would increase costs by +25%
- Requires publication of any waivers on a publicly available website and review of waivers every five years for waivers granted 180 days before the legislation's enactment

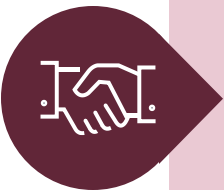
“Produced in the U.S.”
means made of
+55% domestic content

Other broad IIJA goals



Creating more jobs

- Most applications require a discussion of how many jobs the project is anticipated to create
- Davis-Bacon wages, benefits, etc.



Supporting rural communities and tribal nations

- Set aside funding for tribes and programs specifically targeted to rural areas



Other broad IIJA goals (cont.)



Environmental protection

- Environmental remediation and pollution reduction



Resilience and climate change initiatives

- Not just providing reliable service, but preparing for climate change and more extreme weather events that could disrupt future service



Focus on IIJA priorities (cont.)

Justice40 Initiative

40% of the overall benefits of certain federal investments will flow into communities that are marginalized, underserved and overburdened with pollution

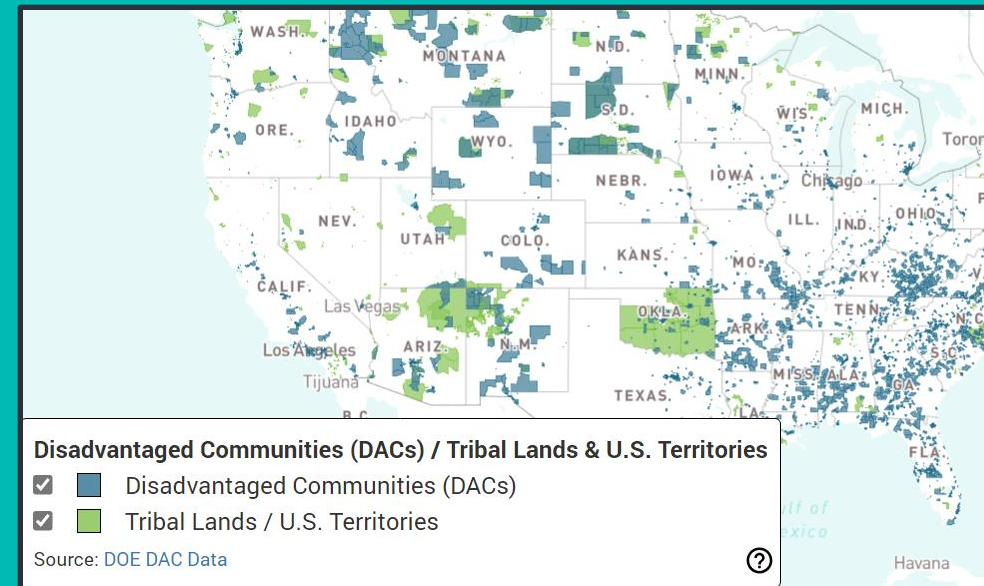
- Climate change
- Clean energy and energy efficiency
- Clean transit
- Affordable and sustainable housing
- Training and workforce development
- Remediation and reduction of legacy pollution
- Clean water and wastewater



Activity: How well do your communities align with Justice40?

Use DOE mapping tools to identify disadvantaged communities served and high community needs

- [Explore the map - Climate & Economic Justice Screening Tool \(geoplatform.gov\)](https://www.geoplatform.gov)
 - Overburdened and underserved census tracts are highlighted on the map as being disadvantaged
- [Energy Justice Dashboard \(anl.gov\)](https://www.anl.gov)
 - Shows census tracts categorized as DACs in blue and federally recognized tribal lands and U.S. territories in green
 - Location search by either common geographies (zip, city, county), tract number (GEOID), tribal name or territory name can provide information on 36 burden indicators for that tract.



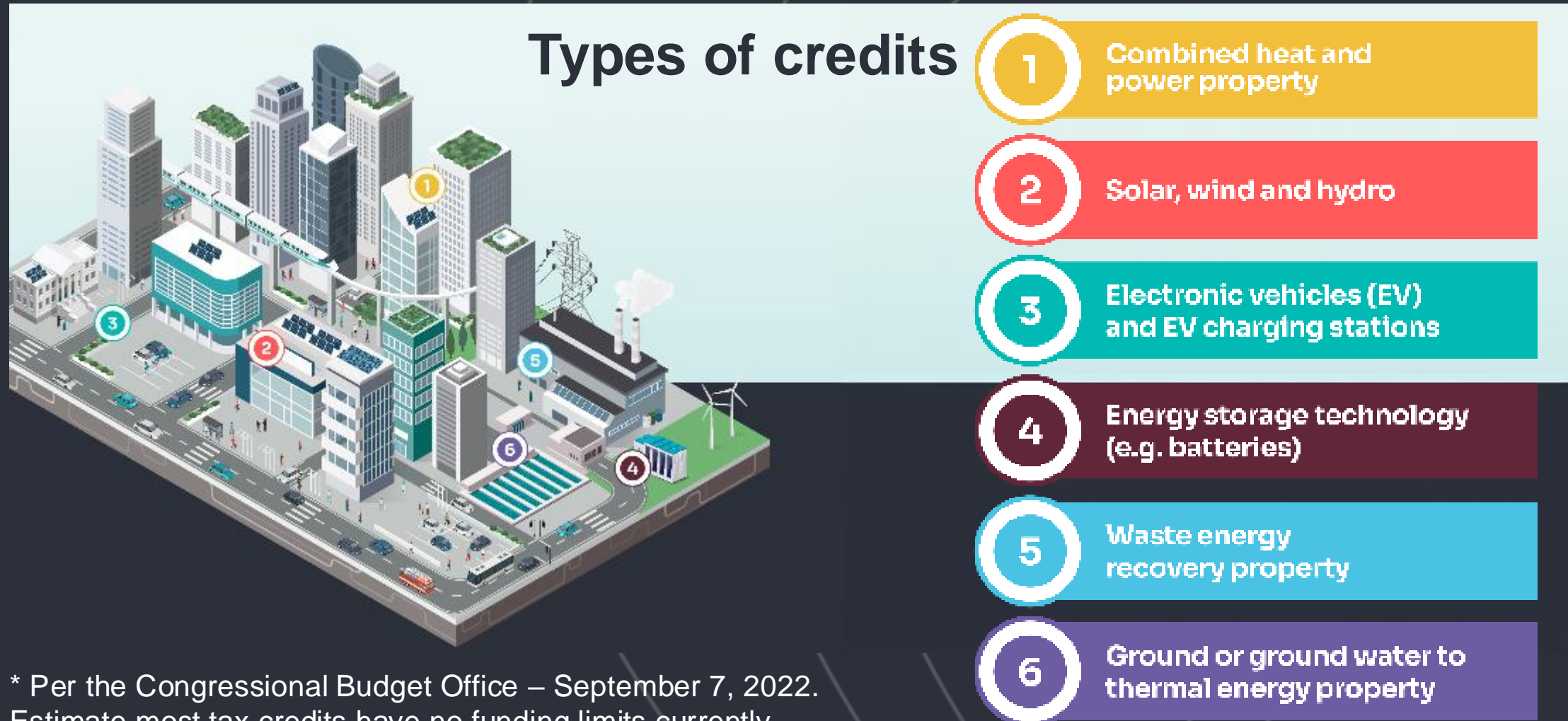
Community benefits plan (CBP)

- New grant requirement for all IIJA grant programs
- Include as section in main project narrative or as a separate narrative entirely (we've seen 12-25 pages for DOE grants)
- CBPs require **full organizational engagement** to generate and execute (an area with which most organizations need assistance)
- **Remember:** IIJA aims to improve U.S. energy, environment and infrastructure and also improve U.S. manufacturing, economy/workforce and equity

Inflation Reduction Act



Inflation Reduction Act 2022: IRA Tax Credit Funding — \$165 billion*



* Per the Congressional Budget Office – September 7, 2022.
Estimate most tax credits have no funding limits currently.

Eligible entities for “qualifying energy projects” tax credits

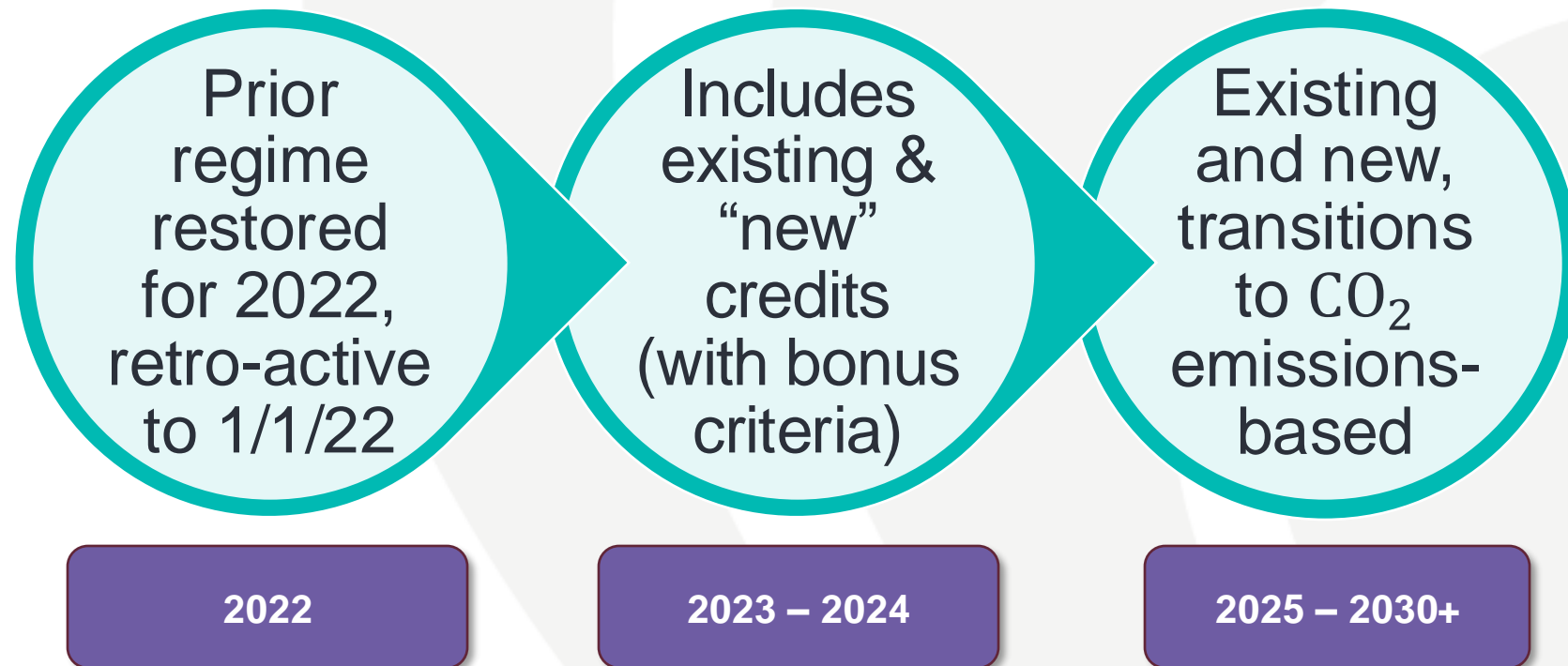
- Cities, towns, counties, municipal utilities and schools are eligible for clean energy tax credits
- File for a direct pay tax credit from the federal government to the tax-exempt entity for qualifying clean energy project.
 - Reduced local funding and direct costs



Inflation Reduction Act

- More than 70 separate tax credits
- Many of these credits and incentives are “entitlements,” (i.e., if your project meets specific criteria, you are entitled to the tax credit)
- Most credits are effectively good through 2032
 - Longest U.S. “energy policy” timeframe ever

Timeline summary:



Direct Pay tax credits

Use of tax-exempt funding for project – tax credit



Environmental justice (for solar and wind)



10%

or

20%

15%

Energy community

Likely credit value can be 6-50% of manufacturing project's eligible base



10%

2% base up to

Domestic content



10%

2% base up to

Or base credit w/
prevailing wage and
apprenticeship
(5x multiplier)

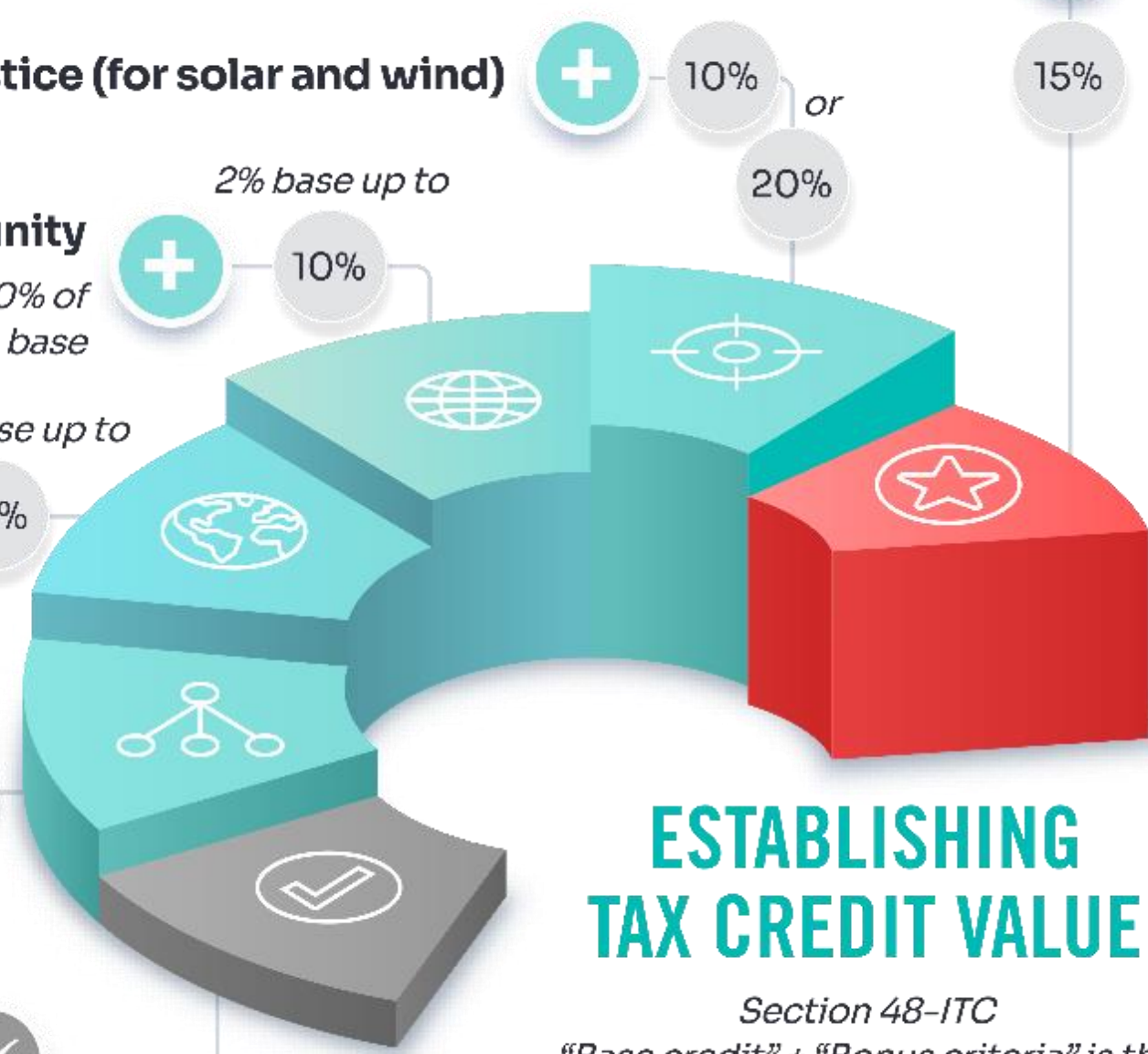


30%

Base credit — e.g., 6% property type



Not all credits apply to all projects



ESTABLISHING TAX CREDIT VALUE

Section 48-ITC

"Base credit" + "Bonus criteria" is the overriding theme of the new credit regime



Prevailing wage and apprenticeship requirements

**Prevailing
wage**

**Tax credit value
reduced substantially
if prevailing wages
are not paid during
construction/
operations**

**“Begin
construction”**

**PW&A requirements
do not apply for
projects that
“began construction”
before Jan. 29, 2023**

< MW AC

**Requirements do
not apply to
projects
< 1 MW AC**

IRA vs Davis-Bacon

- Inflation Reduction Act is **tax law**
- Davis-Bacon and Related Acts (DBRA) is **labor law**
- IRA requirements are "**in accordance with**" **DBRA** but IRA is not a related act
 - DBRA is the framework, not the rules and regulations, for prevailing wage compliance



Domestic content

Domestic content – 2 - 10% additional credit value

- ➔ Steel and iron must be 100% produced in the U.S.
- ➔ Manufactured products are deemed to have been manufactured in the United States if the adjusted percentage of the total cost of the components and subcomponents of the project is attributable to components that are mined, produced or manufactured in the U.S.

Annual adjusted threshold percentages: (e.g., biogas)

- 40% for projects that begin construction before 2025,
- 45% for projects that begin construction in 2025,
- 50% for projects that begin construction in 2026, and
- 55% for projects that begin construction thereafter

Different adjusted percentages apply for offshore wind facilities



Additional reduction in credit for not meeting domestic content

Beginning January 1, 2024, the overall tax credit is reduced in future years **if domestic content requirements are not met**

100%

If construction begins before January 1, 2024

90%

If construction begins in calendar year 2024

85%

If construction begins in calendar year 2025

0%

If construction begins after December 31, 2025

Note: Projects less than 1 MW are exempt from this requirement.

Energy community bonus – 2 - 10%

Definition



Brownfield site



Metropolitan statistical area or non-metropolitan statistical area which

- Has 0.17% or greater direct employment or 25% or greater local tax revenues related to the extraction, processing, transport or storage of coal, oil or natural gas
- Has an unemployment rate at or above the national average unemployment rate for the previous year



Census tract

- Which after Dec. 31, 1999, a coal mine closed
- After Dec. 31, 2009, a coal-fired electric generating unit has been retired
- Adjoining census tract

Energy community resource

See if you are in an energy community. Visit this Baker Tilly tool:

<https://www.bakertilly.com/page/energy-community-mapping-tool>

Energy Communities by Datastory

Enter project address or click on the map to identify if your site potentially qualifies.

phoenix, AZ

Energy Communities

The following is a geographic assessment of your location's qualification for energy community funding.

Potentially Qualifies

Your site needs further evaluation. Please contact Baker Tilly to determine if your site qualifies.

Requirements	Pass/Fail
Are you in a designated brownfield? ** (Approximate Location: Requires site-specific evaluation to confirm.)	? ✓
Are you in an MSA or non-MSA that had 0.17% or greater direct employment related to the extraction, processing, transport or storage of coal, oil, or natural gas at any time after Dec. 31, 2009?	✗



Environmental justice solar and wind capacity bonus

Qualified solar and wind facility

- Generates electricity solely from wind or solar
- Has a maximum net output of less than 5 megawatts
 - Located in a low-income community (45D(e)) or on Indian land
 - Part of a qualified low-income residential building project or a qualified low-income economic benefit project

Credit increase

- Possible increase of 10% or 20%
- Must receive environmental justice solar and wind capacity limitation allocation

Section 48E – Clean Electricity Investment Credit

- Same credit rate as Section 48
- Criteria
 - Qualified facility
 - Used to generate electricity
 - Placed in service after December 31, 2024
 - GHG emission rate not greater than zero
 - Energy storage technology



Greenhouse Emission Rate

- Combustion and gasification (C&G) facilities
 - Example: biomass systems and waste energy recovery systems
 - Life cycle analysis of GHG emission calculation required
 - Total emissions from the feedstock generation to the transmission to the grid
- Non-C&G facilities
 - Certain non-C&G facilities automatically qualify for net zero emission status
 - **Wind power** - which encompasses small wind properties
 - **Hydropower** - such as retrofits to non-powered dams, conduit hydropower, hydropower with new impoundments and diversion-based hydropower using penstocks or channels.
 - **Marine and hydrokinetic**
 - **Solar power technologies** - both photovoltaic and concentrated solar power (CSP)
 - **Geothermal energy** - including flash and binary plants.
 - **Nuclear energy** - including both fission and fusion processes, qualifies under this category.
 - **Waste energy recovery properties** that derive energy from these renewable sources are recognized for their role in minimizing greenhouse gas emissions

Electric vehicles (IRC 30D)

- EVs and plug-in hybrid EVs are eligible for tax credits
- EVs are eligible for up to \$7,500 of tax credits
- Only eligible for vehicles undergoing final assembly in North America and meeting critical mineral and battery components



Alternative Fuel Vehicle Refueling Property Credit (30C)

- IRA included meaningful incentives to offset the cost of installing electric vehicle (EV) refueling/charging stations and credits to subsidize the purchase of EVs
- An Alternative Fuel Vehicle Refueling Property Credit for 6% to 30% (base credit x 5 if PWA is met) of total costs of purchase and installation of charging equipment—up to \$100,000 per charger
- “Qualified alternative fuel vehicle refueling property” includes equipment used to dispense or store alternative fuels such as ethanol, natural gas, hydrogen and electricity
- Eligible census tract: Refueling property must meet the census tract requirements and located in a low-income community (as defined by the New Markets Tax Credit program) or a non-urban area
- Project must be placed in service after January 1, 2023



Timing and planning for IRA projects

Any timing concerns?



Most IRA tax credits will be available for 10+ year



Time to take advantage of tax incentives and plan Grants and other funding programs to roll out soon



Pre-filing with IRS is required before a “Direct Pay” election can be made on form 990-T and late election relief will not be available

“Begun construction”

Taxpayers may use two methods to establish the date of beginning of construction:

1. **By starting physical work of a significant nature (physical work test) or**
 - Physical work can be performed onsite or offsite
2. **By having paid or incurred 5% or more of the total cost of the facility (5% safe harbor)**
 - To have incurred the costs the taxpayer/project must reasonably expect to receive the equipment within 3.5 months of payment

For both tests:

- Taxpayers must demonstrate either continuous construction or continuous efforts (continuity requirement)
- A binding written contract, that is non-refundable, will need to be entered into with each vendor so costs are incurred prior to Dec. 31, 2024

Takeaway: Meet the begun construction tests now to preserve your tax credit amount



“Begin
construction”

**Originally framed in via
IRS Notice 2013-29 and 2013-60,
with ongoing clarifications in
subsequent notices
(2018-59 most recent)**



Physical work of a significant nature basics

- Focus of this test is on nature of the work performed, NOT the amount or the costs
- Physical work does not include preliminary activities
- Can be performed either “on site” or “off site” (e.g., the factory)
- Physical work does not include work to produce property that is in inventory or typically held in inventory by a vendor

Non-qualifying physical work activities



**Planning and
designing**



Financing



Permitting



Surveying



Studies

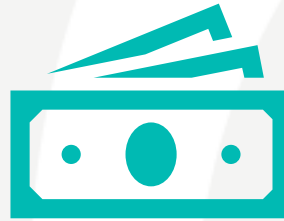


Site clearing

5% safe harbor



Owner must incur or pay for 5% or more of the total cost of the facility



**Qualifying costs:
All costs properly included in the depreciable basis of the facility**



No physical construction requirements

5% safe harbor (cont.)

Key items under 5% safe harbor

- Incurring 5% of project cost is more than just “paying” in certain scenarios
- Definition of “incurred” looks to existing Internal Revenue Code under §461
 - Economic performance and 3½ month rule

Continuous construction requirement

Continuous construction or continuous efforts tests

- Continuing work of physical significant nature each year
- Paying or incurring additional costs related to energy property
- Facts and circumstances based

Continuity safe harbor – placed in service within 4 calendar years of beginning construction



IRA project planning

Resource planning for future projects



- Meeting and documenting begun construction takes involvement across the entire project team and vendors
- Documentation subject to scrutiny by IRS and credit buyers

Solar array for wastewater treatment plant under 1 megawatt

- Estimated project costs \$2.3 million
- Estimated tax credit **\$650,000**
- Net present value savings factoring in reduced energy costs \$1.6 million
- Prevailing wage and apprenticeship requirements less than 1 megawatt exemption
- Domestic content requirements difficult to meet



Geothermal heating and cooling for municipal buildings

- Estimated project costs \$24 million
- Estimated tax credit **\$7 - \$10 million**
- Geothermal costs more expensive than standard boilers, but not with tax credits applied
- Proposed guidance could make geothermal more beneficial
- Prevailing wage and apprenticeship requirements need to be met
- Domestic content requirements could be met in an energy community.



Next steps?

Start with the end goal in mind and work back through funding streams

- ARP
- IIJA
- IRA tax credits
- Competitive and non-competitive grants (ARP and IIJA)
- State and local funds
- Debt

1

Holistic approach to strategic planning

2

Start with where you are today

3

Focus on a utility's driven goal(s)/result

4

Develop a strong team

Helpful resources

- [Bipartisan Infrastructure Law Guidebook](#)
- [Building a Better America | The White House](#)
- [SAM.gov entity registrations](#)
- [marketplace.ever.green](#)
- Grants.gov
 - [Registration](#)
 - [How to create an account and link to a Login.gov account](#)
 - [Add profile](#)
- Explore the map - Climate and economic justice screening tool ([geoplatform.gov](#))

THANK YOU

**Comments /
questions?**

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