

Advanced Nuclear Energy Tax Provisions in the Inflation Reduction Act of 2022

On August 16, 2022, President Biden signed the Inflation Reduction Act (IRA), creating two new technology neutral tax credits for zero-emitting, clean energy projects: a Clean Electricity Production Tax Credit (PTC) and a Clean Electricity Investment Tax Credit (ITC). The technology tax credits are intended to accelerate deployment of clean energy technologies, including advanced nuclear reactors. A project developer could elect either tax credit, but not both. Below is a summary of the two new tax credits that advanced nuclear energy projects can choose from:

	Adva	nced Nuclear PTC and ITC	
Tax Provision	Value without satisfying wages and apprenticeship requirement	Value with satisfying wages and apprenticeship requirement	Additional booster(s)
Clean Electricity Production Credit (PTC)	0.5 cent/kWh*	2.5 cents/kWh*	10% domestic content bonus
			10% booster if project located within an energy community
Clean Electricity Investment Credit (ITC)	6% of initial capital cost	30% of initial capital cost	10 percentage point domestic content bonus
			10 percentage points if project is placed within an energy community

*The Clean Electricity Production Credit is adjusted for inflation every year and the values in this table are given in 2021 dollars

As shown above, IRA encourages clean energy project developers to invest in workers and communities by boosting the tax credits for projects that pay prevailing wages, provide for apprenticeships, and/or are sited in energy communities. Municipal power companies or tax-exempt cooperatives are eligible for "direct pay", which means they can receive a payment from the government in lieu of a tax credit. For private entities, the tax credits are transferable to any other taxpayer. To be eligible for either credit, projects must be placed in service after December 31st, 2024. (This is an important improvement relative to the House-passed Build Back Better bill that tied eligibility to commencing construction after December 2026.) The PTC would be available for electricity produced during a facility's first 10 years of operation. The credits begin to phase out for new facilities that commence construction after 2032, or when power sector greenhouse gas emissions decline by 75% relative to 2022 levels, whichever is later. Each credit would phase out over a three-year period - 75% of the initial value after the first year, 50% of the initial value after the second year, and then 0% after the third year.

Another important incentive in the IRA is a "Clean Hydrogen" Production Tax Credit. Hydrogen produced from nuclear power plants will be eligible for the tax credit. The Hydrogen PTC base value is \$0.60/kg, rising to \$3.00/kg of clean hydrogen produced for projects that pay prevailing wages, provide for apprenticeships, and/or are sited in energy communities. For more information about tax policies in the IRA and tax policy analysis for advanced nuclear energy projects, please contact Victor Ibarra Jr. at the Nuclear Innovation Alliance (vibarrajr@nuclearinnovationalliance.org).