Grid Deployment Office: Transmission and Grid Funding Opportunities

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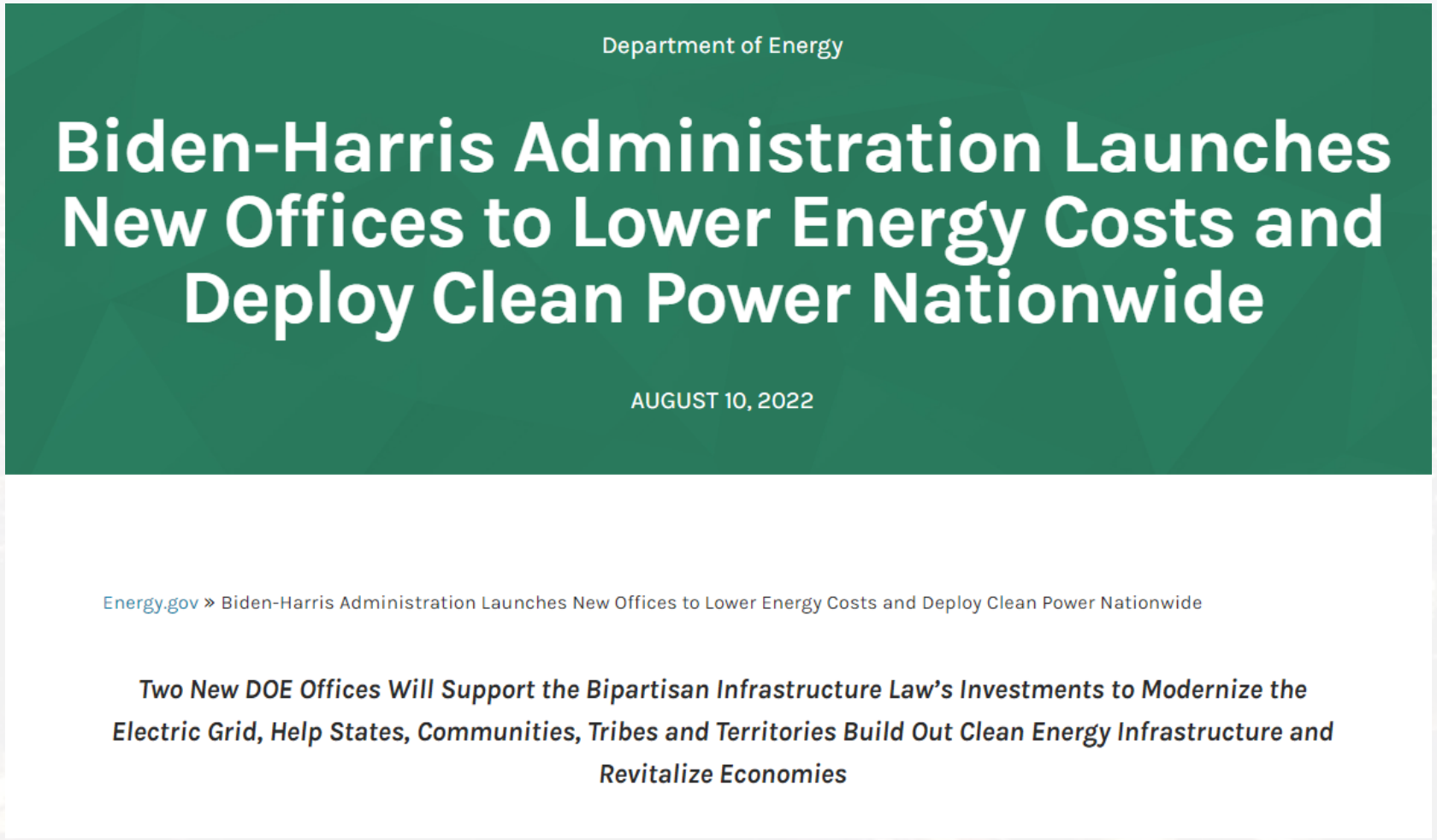
The New Grid Deployment Office



Department of Energy

Biden-Harris Administration Launches New Offices to Lower Energy Costs and Deploy Clean Power Nationwide

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Two New DOE Offices Will Support the Bipartisan Infrastructure Law's Investments to Modernize the Electric Grid, Help States, Communities, Tribes and Territories Build Out Clean Energy Infrastructure and Revitalize Economies

BIL Programs for the grid include transmission and distribution

Program Name (DOE)	Total Funding	Program Goal
Preventing Outages and Enhancing the Resilience of the Electric Grid / Hazard Hardening - (Grid Resilience Grants")	**$5 billion**	• Half is State and Tribal Grid Resilience Formula Grant; Half Competitive Utility/Industry Grid Resilience Grant Investments tied to state & tribal led objectives, criteria and methods for resilience investments
Program Upgrading Our Electric Grid and Ensuring Reliability and Resiliency ("Grid Innovation Program")	**$5 billion**	• Large infrastructure projects, including transmission, distribution and storage. • Partnership between state entities and project / infrastructure developers
Deployment of Technologies to Enhance Grid Flexibility ("Smart Grid Grants")	**$3 billion**	• Deployment of technology at scale, prioritization of technologies that increase transmission capacity, mitigate wildfires, manage load / electrification of “edge devices”, and incorporate secure communications / cybersecurity
Transmission Facilitation Program	**$2.5 billion**	• Transmission deployment of new and upgrading high-capacity transmission lines. 3 tools: Capacity contracts, loans, and public-private partnerships

State, Territory, & Tribal Formula Grid Resilience Grants

$2.5 Billion (approximately $500 million per year for FY 22-26)

- **Formula based on population, area, probability, severity of disruptive events and expenditure on mitigation efforts.**
- **States, Territories, and Tribes funded via annual formula grant**
  - 15% cost match
- **States, Territories, and Tribes may subgrant to eligible entities for projects**
  - 100% cost match for subgrantee
- **FY22 Grants range:**
  - States: $1.5M - $33.8M
  - Territories: $700K - $3.7M
  - Tribes: $30K - $2.1M

Goals & Objectives:

- Demonstrate measurable improvements in **energy resilience** to all hazards in the United States and mitigate climate-related risk,
- Invest in **modernized grid infrastructure** that can enable consumer access to lower-cost energy and accommodate increased electrification, increased penetrations of variable renewable electricity and distributed energy resources, and other evolving system needs over the coming decades,
- Invest in **clean energy** and **decarbonization solutions** to achieve a carbon-free power sector by 2035 and net-zero greenhouse gas emissions economy-wide by 2050, and
- Create **good-paying jobs** with the free and fair choice to join a union

FY22 applications are open now

U.S. DEPARTMENT OF ENERGY | Grid Deployment Office

Eligible Investments for Grid Resilience Grants

- Utility pole management
- Hardening of power lines, facilities, substations, of other systems
- Undergrounding of electrical equipment
- Replacement of old overhead conductors and underground cables
- Relocation of power lines or the reconductoring of power lines with low-sag, advanced conductors
- Vegetation and fuel-load management
- Weatherization technologies and equipment
- Fire-resistant technologies and fire prevention systems
- Monitoring and control technologies
- Use or construction of distributed energy resources for enhancing system adaptive capacity during disruptive events, including microgrids and battery-storage subcomponents
- Adaptive protection technologies
- Advanced modeling technologies

Resilience measures that are **NOT** allowed under this provision include:

Construction of a new - electric generating facility; or large-scale battery-storage facility that is not used for enhancing system adaptive capacity during disruptive events; or cybersecurity.

Grid Resilience and Innovation Partnerships (GRIP) Program

These programs will be released as one funding opportunity but provide opportunities for various applications to various entities including states, tribes, utilities, and industry.

1. Utility & Industry Grid Resilience Grants (Competitive)
2. Grid Innovation Program (Competitive)
3. Smart Grid Grants (Competitive)

Request for Information (RFI) and Draft Funding Opportunity Announcement (FOA) are out now for comment through October 14th 5pm ET.

FOA release expected mid-November for FY22 and FY23 funding (~$4.2 billion).

1. Competitive Utility/Industry Grid Resilience Grants

$2.5B Total ($500 million/year FY 22-26)
FY22 and 23: Up to $1 Billion

Eligible Entities

- Grid operators
- Storage operators
- Electricity generators
- Transmission owners or operators
- Distribution providers
- Fuel suppliers

- Capped at the amount the eligible entity has spent in the previous 3 years on hardening efforts
- Small Utility Set Aside (for those selling no more than 4 million MWh of electricity per year)
  - Must match 1/3 of grant amounts received
  - At least 30% must go to small utilities
- **Cost Match** = 100%

Prioritize projects generating the greatest community benefit in reducing the likelihood and consequences of disruptive events.

2. Grid Innovation Program

$5B Total ($1 billion/year for FY22–26)
FY22 and 23: Up to $2 Billion

- Demonstrate innovative approaches to transmission, distribution, and storage to harden and enhance resilience and reliability; and
- Demonstrate new approaches to enhance regional grid resilience implemented through States by public and rural electric cooperative entities on a cost-shared basis.

- Eligible Entities
  - a State;
  - a combination of 2 or more States;
  - an Indian Tribe;
  - a unit of local government;
  - a public utility commission

Cost Share: 50% Minimum

2. Grid Innovation Program (continued)

Primary Objectives:

- Ensure reliable grid operations
- Improve overall grid resilience
- Enhance collaboration between and coming eligible entities and private and public sector owners and operators on grid resilience
- Contribute to the decarbonization of the electricity and broader energy system
- Provide enhanced system value, improve current and future system cost-effectiveness and deliver economic benefits

Areas of Interest for Applications:

- Transmission capacity enhancements
- Advanced distribution grid assets and functionality
- Combined systems demonstrating innovative approaches

3. Smart Grid Grants

$3B total ($600 million/year FY 22-26)
FY22 and 23: Up to $1.2 Billion

- **Grants to support the deployment of technologies to enhance grid flexibility**
- **Open Eligibility**
  - Institutions of higher education;
  - For-profit entities;
  - Non-profit entities;
  - State and local governmental entities, and tribal nations.
- **Cost Share: At least 50% of grant**

Goals & Objectives:

- **Increase Transmission Capacity**
  - Grid Enhancing Technologies
- **Mitigate Wildfires**
  - Asset Management Technologies
- **Load Management/Electrification of "edge devices"**
  - Managed Charging/Grid Infrastructure and autonomous control
- Incorporate **Secure Communications/Cybersecurity**

The Smart Grid Investment Grant (SGIG) program was previously funded under the Recovery Act, which awarded $3.5 Billion of grants during FY 2009 & 2010 for activities through FY 2015

Transmission Facilitation Program (TFP)

TFP is $2.5 Billion in revolving fund borrowing authority.

The TFP is a **revolving** fund program that will provide Federal support to overcome the financial hurdles in the development of large-scale new transmission lines, upgrading of existing transmission, and the connection of microgrids in select States and U.S. territories.

- First RFP will focus on projects that can begin construction by year-end 2027
- Best fit for projects that are nearly "shovel ready" and are in regions that rely on firm point-to-point transmission
- TFP designed for projects that would otherwise not be constructed without support
- Will NOT include projects that already are fully subscribed or have a fully allocated source of revenue

Financing Tools:

1. **Capacity Contracts**
   - **Buy up to 50% of planned line rating for up to 40 years**
   - **Sell capacity contract to recover costs**
2. Loans
3. Public Private Partnerships
   - Within a national interest electric transmission corridor (NIETC)
   - Necessary to accommodate an increase in electricity demand across more than one state or transmission planning region

IRA Funding for Transmission in GDO

Transmission Facility Financing

- Provides $2 billion in direct loan authority for facility financing.
- For projects designated by the Secretary to be necessary in the national interest under section 216(a) of the Federal Power Act

Grants to Facilitate Transmission Siting - $760 million

- Grants to siting authorities and other governmental bodies to facilitate and accelerate the siting and permitting of high voltage interstate and offshore transmission projects.

Interregional and Offshore Wind Electricity Transmission Planning, Modelling and Analysis - $100 million

Current Status & Timeline of Funding

Grid Resilience Formula Grants

- FY22 applications extended to 3/31/23
- Funds disbursed on a rolling basis

Grid Resilience & Innovation Programs (GRIP)

- RFI open for comment 8/30/22 - 10/14/2022
- RFP open Fall ‘22
  - Grid Resilience Utility & Industry Competitive Grants – 40101(c)
  - Grid Innovation Program – 40103(b)
  - Smart Grid Grants – 40107

Transmission Facilitation Program

- First round solicitation available Fall ‘22

Transmission Facility Financing (Inflation Reduction Act)

- TBD

For More Information…

Grid and Transmission Programs Conductor | Department of Energy

- Clearinghouse for GDO's transmission and grid resilience financing programs

Email us at Transmission@hq.doe.gov