America's Renewable Incentives for Energy Sustainability
(ARIES)

ARIES Approach

"America's Renewable Incentives for Energy Sustainability" (ARIES) provides a framework to incentivize renewable energy production at a cost determined reasonable by Congress. Under ARIES, the government does not pick specific renewable technologies but focuses on incentivizing the production of renewable versions of energy products that are commonly used today.

The tax reduction can be either an investment tax credit (ITC) or a production tax credit (PTC), whichever is most suitable for the producer. The ITC is based on the percentage of the cost of capital investment and the PTC is calculated by measuring the energy content (per MMBtu) of the renewable energy produced.

ARIES Goals

If Congress chooses to continue to support renewable energy, **as part of comprehensive tax reform**, to further the goals of improving the environment, enhancing energy security and creating jobs, the ARIES approach can help address the following objectives:

- Creating a simpler and fairer system to replace the existing complex renewable energy tax incentive scheme;
- Developing a market among renewables - potentially leading to lower cost renewable energy;
- Eliminating the picking of specific renewable technologies over others;
- Increasing the penetration of renewables across a wider spectrum of energy use;
- Focusing science and investment on creating renewable versions of energy products that are widely used today;
- Enhancing utilization of existing infrastructure for renewable energy delivery and use;
- Providing parity among renewable energy producers; and
- Creating a flexible framework for innovation leading to more efficient production of renewable energy.

ARIES Framework

In crafting ARIES, Congress will need to determine:

1. The energy products used by residential and business consumers for which renewable options are desired **(e.g., electricity, gasoline, diesel, natural gas, oil, propane, ethanol, etc.)**;
2. Accepted renewable energy resources as set forth in Section 45 of the US tax code;
3. A mechanism to set consensus based standards/guidelines by which energy users and producers address the composition and energy content of renewable energy products receiving incentives;
4. The dollar amount of the PTC per/MMbtu and percentage for the ITC;
5. Optional additional metrics that could lead to enhanced incentive values
    a. Environmental benefits
    b. Reliability
    c. Security
    d. Market indexing

ARIES Detail

- To encourage long-term investment, ARIES should be permanent in the tax code with a mechanism to review future rate adjustments to the PTC or ITC.
- Proposed 30% ITC option
- 10 year life of PTC is from the facilities' start of operation
- To address potential new energy use patterns, additional renewable energy products could become eligible for ARIES in the future

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ARIES Cost

The cost of ARIES will be determined by the amount of the legislatively agreed upon PTC and percentage for the ITC. Initial estimates suggest a meaningful ARIES based program can be developed for between $25B and $30B over ten years (**based on current Joint Committee on Tax scoring of existing renewable energy tax credits**).

ARIES Examples

MMBtu amounts below are only *examples* for discussion and would ultimately be determined by Congress.

Renewable Product	ITC	PTC/per MMBtu	PTC equates to
Renewable Electricity	30%	$3.25	1.1 cents per kWh
Renewable Transportation Fuels/ liquid, gases or electricity	30%	$3.25	Gasoline - 38 cents per gallon Diesel - 43 cents per gallon
Renewable Natural Gas	30%	$3.25	$3.25 per MMBtu

Renewable Product	ITC	PTC/per MMBtu	PTC equates to
Renewable Electricity	30%	$4.25	1.5 cents per kWh
Renewable Transportation Fuels/ liquid, gases or electricity	30%	$4.25	Gasoline - 49 cents per gallon Diesel - 56 cents per gallon
Renewable Natural Gas	30%	$4.25	$4.25 per MMBtu

(Electricity Btu conversion based on 3412 Btu/kWh)
Renewable gasoline 115,400 BTU's per gallon
Renewable diesel 131,750 BTU's per gallon