June 30, 2023

Energy Tax Credits and the Global Minimum Tax

The Internal Revenue Code (IRC) (often referred to simply as the tax code) contains a number of credits to encourage certain investments. These include energy credits, some of which were enacted in P.L. 117-169 (commonly referred to as the Inflation Reduction Act of 2022, IRA) and intended to encourage investment in certain renewable energy technologies. (Other major business credits include the research and experimentation, or R&E, credit and the low-income housing credit.) Concurrently, countries around the world are planning to implement a 15% global minimum tax on large multinationals (GLoBE). Tax credits, like the energy credits, lower the effective tax rates on taxpayers that claim them. Under a GLoBE regime, the reduced effective tax rates that result from these energy credits may trigger an additional tax that offsets or eliminates their benefits. Whether an additional tax would apply depends on the nature of the business making the investment, the magnitude and design of the credits, and whether investments are active or passive.

Energy Tax Credits

The tax code includes multiple energy tax provisions—several of which were extended and expanded by the IRA. A brief summary of the changes and a comparison to prior law can be found in CRS Report R47202, *Tax Provisions in the Inflation Reduction Act of 2022 (H.R. 5376)* (for further information, congressional clients may contact Donald J. Marples). In addition to these changes, the IRA also allowed certain energy credits to be refundable or transferable.

Within the context of businesses likely to be subject to the GLoBE regime and other businesses, only selected IRA energy tax provisions are eligible for refundability. Refundability generally allows organizations to treat the amount of the tax credit as a tax payment—with overpayments of tax being refundable. (A broader set of IRA energy tax provisions are refundable to specific types of tax-exempt entities.) If refundability is elected, the tax credits can be claimed for the first five years starting with the year a facility is placed in service, as opposed to a potentially longer period if refundability is not elected. As shown in **Table 1**, refundability is allowed for three tax credits available to large multinational businesses that may face a global minimum tax.

Businesses likely to be subject to the GLoBE regime (along with other businesses) are allowed a one-time transfer of a broader set of tax credits. Any payments received in exchange for the transfer of credits would be excluded from the selling business's income, and any amounts paid to obtain a transferred credit could not be deducted from the recipient business's income. As shown in **Table 1**, transferability is allowed for 12 tax credits to businesses that may face a global minimum tax.

Table 1. Selected Energy Tax Credits That May Be Refundable or Transferable for Large Multinational Corporations

	Refundable	Transferable
Alternative Fuel Vehicle Refueling Property Credit (IRC Section 30C)		X
Renewable Energy Production Tax Credit (IRC Section 45)		X
Carbon Oxide Sequestration Credit (IRC Section 45Q)	X	X
Zero-Emission Nuclear Power Production Tax Credit (IRC Section 45U)		X
Clean Hydrogen Production Tax Credit (IRC Section 45V)	X	X
Qualified Commercial Vehicles (IRC Section 45W)		X
Advanced Manufacturing Production Tax Credit (IRC Section 45X)	X	X
Clean Electricity Production Tax Credit (IRC Section 45Y)		X
Clean Fuel Production Tax Credit (IRC Section 45Z)		X
Energy Investment Tax Credit (IRC Section 48)		X
Qualifying Advanced Energy Investment Tax Credit (IRC Section 48C)		X
Clean Electricity Investment Tax Credit (IRC Section 48E)		X

Source: CRS analysis of the Internal Revenue Code.

The Global Minimum Tax and Tax Credits

The Organisation for Economic Co-operation and Development (OECD) has advanced a number of proposals to address international profit shifting. One of these proposals, referred to as Pillar 2 or GLoBE, would impose a minimum tax of 15% in each country for large multinational corporations with global or total revenues over €750 million (about $820 million as of June 15, 2023). Pillar 2 is discussed in more detail in CRS Report R47174, *The Pillar 2 Global Minimum Tax: Implications for U.S. Tax Policy*, by Jane G. Gravelle and Mark P. Keightley.

GLoBE is based on financial income and allows a deduction for 5% of payroll and 5% of tangible assets. The carve outs are larger in the short term, beginning at 10% of payroll and 8% of tangible assets. The purpose of these deductions is to focus the minimum tax on intangible income with the goal of addressing profit shifting by firms locating intangible assets in low-tax countries.

GLoBE allows three types of top-up taxes to achieve the 15% minimum tax, which apply in a specific order:

- **Qualified Domestic Minimum Top-Up Tax (QDMTT):** the source country can apply a QDMTT to achieve the 15% rate.
- **Income Inclusion Rule (IIR):** If a country does not enact a QDMTT, the country where the parent company is located can apply the IIR to the parent to impose the tax on its subsidiaries at a 15% rate.
- **Undertaxed Payments Rule (UTPR):** If neither of these taxes are enacted, countries where related companies are located can apply the tax under the UTPR to those companies to collect the tax. Countries that enact a UTPR can collect a share of the top-up tax based on the share of tangible assets and employees located in the country.

Numerous countries are in the process of adopting Pillar 2; these include members of the European Union, the UK, Canada, Japan, and South Korea (the United States has not adopted Pillar 2), and elements of the tax may be imposed by 2024. Even if the United States takes no action to adopt Pillar 2, U.S. multinational firms may be subject to a top-up tax under the IIR and the UTPR. The UTPR means that any other countries where U.S. firms have related companies may impose a tax on those related companies' domestic operations. Subsidiaries of foreign firms operating in the United States may be subject to the IIR or the UTPR. U.S. firms' domestic operations may be subject to the UTPR.

Tax credits are treated in three different ways under the Pillar 2 model rules. Ordinary credits reduce the effective tax rate and can trigger additional Pillar 2 taxes. Refundable tax credits are treated as increases in income rather than reductions in taxes. This difference is significant. For example, if a firm has a 15% tax rate before credits and credits reduce the rate to 10%, an additional tax of 5% will apply. That additional tax will eliminate the credit's benefit. If the credit is refundable, the effective tax rate is reduced to 14.3% (15/105), and an additional 0.7% tax will apply.

Finally, under the equity method of accounting, income and any associated tax credited will be excluded from the effective tax rate calculation. The equity method of accounting applies in cases where a firm has a noncontrolling interest in a subsidiary or venture. Thus, firms that have passive investments in projects that benefit from tax credits will not have reductions in effective tax rates from these credits. Many credits, including low-income housing credits and some energy credits, would therefore not have their incentives reduced through Pillar 2 taxes.

The treatment of transferable credits in financial accounting is unclear, although a 2023 analysis by PwC suggests that under generally acceptable accounting principles (GAAP), these credits are to be accounted for as a reduction in taxes, and therefore treated as ordinary credits. Thus, energy credits that are part of the core business (along with the R&E tax credit) may be offset by the Pillar 2 tax.

Policy Options

The broadest option is to make all general business credits refundable, which would preserve the value of energy and other credits by treating them as an increase in income. The PwC study estimates the cost of this approach at $193 billion over FY2023-FY2032, an average of $19 billion per year. This amount would be reduced to $172 billion if preexisting unused credits were disallowed. Historically, the tax code has not made any business credits refundable (although certain personal credits are).

A second, more limited option would be to make more of the transferable energy credits refundable. These credits account for less than 20% of the total of R&E, low-income housing, and business energy credits, so the cost would be much smaller. Transferable credits have similar effects to refundability, so this provision might cost little revenue, while allowing more generous treatment of credits under Pillar 2.

A third option would be to negotiate with the OECD to allow transferable credits to be treated the same as refundable credits, since the economic effects are similar.

A fourth option would be to allow taxpayers to defer part or all of the credit until a future time when taxes are higher and the credit would not trigger a Pillar 2 tax.

Additionally, if these options are not feasible, the United States could consider enacting a general QMDTT so that the United States, rather than other countries, would collect the tax. This top-up tax could apply only to companies subject to GLoBE.

Jane G. Gravelle, Senior Specialist in Economic Policy
Donald J. Marples, Specialist in Public Finance

IF12439