THE GREEN LEAF

Green Policy Rush

Algebris Investments

February 2023

Green Policy Rush

Recent approvals of government funds accelerating the green transition seem to be good news. The most prominent developed and emerging countries are competing to defend their economies, and promote their green investment plans at the same time.

These government support are effectively represented by direct investments in Net-Zero technologies, which puts the United States in a favourable position relative to other countries. We are now seeing the domino effect, that positively impacts the transition towards a Net-Zero economy through a common response. This rush is expected to **enhance green technological innovation**, potentially raising global productivity levels.

Already approved measures include the well-telegraphed US *Inflation Reduction Act*, covered in detail below, and Japan's green transformation plans, which aim to raise up to JPY 20 trillion (c. € 140 billion) through 'green transition' bonds. India, Canada, the UK, and many other countries have also put forward incentive-based investment plans in green technologies.

This rush is expected to enhance green technological innovation, potentially raising global productivity levels.

Europe is seeking to define an appropriate response through its *Green Deal Industrial Plan for the Net-Zero Age*, for which the most recent proposal is discussed below. Europe is now expected to identify what it believes to be unfair competition in this green policy rush, given that China's subsidies have long been twice as high as those in the EU relative to GDP. China's pipeline of announced investments in clean technologies now exceeds $280 billion, extending a distortion that has led to China's domination in the manufacturing of Net-Zero technologies so far.

UNITED STATES

Inflation Reduction Act

The Inflation Reduction Act (IRA) is a measure introduced in the US on 15th August 2022. The act aims to reduce carbon emissions through incentives and tax credits to industries involved in positively impacting climate change between 2023 and 2031. This will result in a **40% reduction of Greenhouse Gas** (GHG) emissions by 2030.

The total amount of the bill is around **$400 billion for Climate Change** and around $100 billion for healthcare. The IRA is intended to be a self-financed bill and is expected to reduce the US net deficit by $1.9 trillion in the next 20 years, as estimated by the Committee for a Responsible Federal Budget (CRFB). The positive effects of the measure will be achieved through both Health Savings and tax revenues.

Climate Change funds will be directed to specific important sectors, such as Clean Energy, Climate and Air

Pollution, Clean Mobility, Clean Manufacturing and Agriculture (Chart 1)

The IRA aims to unlock a significant acceleration toward a Green Economy, drastically reducing carbon emissions and helping businesses involved in the aforementioned sectors to become the Green Transition leaders. When compared to the past few years, the **US annual federal climate spending** for the IRA will almost **triple going to 2030** (Chart 2).

Chart 1 | Where Climate change funds are going

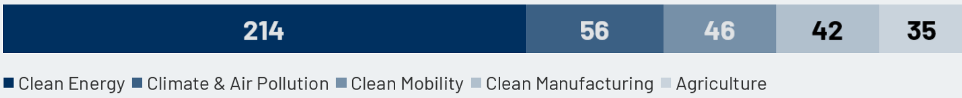
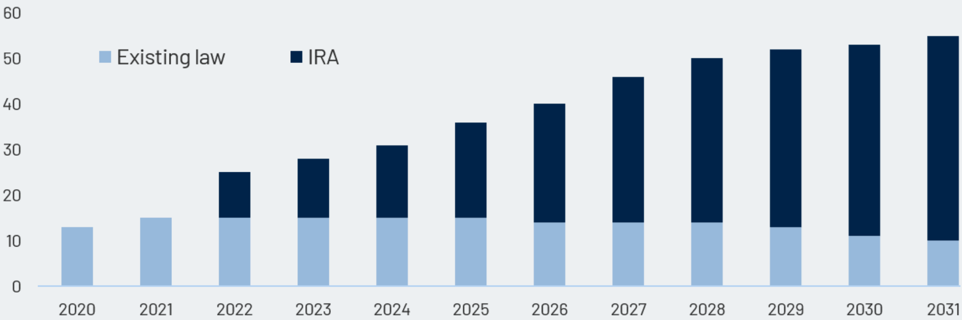


Chart 2 | US Federal Climate Annual Spending ($bn)



Sources: "Understanding the Inflation Reduction Act", The Council of State Governments, 08/16/2022. "IRA Saves Almost $2 Trillion over Two Decades", Committee for a Responsible Federal Budget, 08/03/2022. "US Inflation Reduction Act: What's new, what's next and stocks to own", Goldman Sachs, 12/14/2022. "A Green Deal Industrial Plan for the Net-Zero Age", European Commission, 02/01/2023. "Questions and Answers: Green Deal Industrial Plan for the Net-Zero Age", European Commission, 02/01/2023. "What's New from European IRA Official Document", Morgan Stanley, 02/01/2023.

The IRA has also a reinforcement role with regard to the previously approved Bipartisan Infrastructure Law (BIL). Taken together, the acts aim to create a catalyst for investments in domestic manufacturing capacity, encourage procurement of critical supplies domestically or from free-trade partners, and jump-start R&D and commercialization of leading-edge technologies. More specifically, energy funding is organised by theme and source into the following subdivisions: Batteries and Renewables, Clean Electricity, Carbon Capture, Nuclear, Clean Transportation, Efficiency, Hydrogen, Grid and Resiliency, Clean Energies, Smart Tech and Recycling.

We believe that IRA beneficiaries will see incremental capex as a result of the measure, given improved cost-effectiveness for every green capex project.

Additionally, the IRA has the potential to reduce the impact of fuel price volatility on consumers' bills, which will stabilise the most volatile component of inflation.

The size and duration of tax credits, coupled with cheaper energy costs, make relocating manufacturing capacity to the US a more attractive option for some foreign companies. This is particularly true when compared to what was observed in Europe, where the REPowerEU program, until the recent European Commission proposal, did not provide any explicit monetary incentives but was rather focused on tightening regulations.

EUROPEAN UNION

Green Deal Industrial Plan for the Net-Zero Age

As a response to the US IRA, the European Union (EU) will approve the Green Deal Industrial Plan for the Net-Zero Age. The European Green Deal is intended to preserve the attractiveness of the EU for Net-Zero investments vis-a-vis the US. The Ukrainian war has accelerated the European shift toward a **Net-Zero economy**, as the phase-out of Russian fossil fuels has strengthened a new industrial revolution aimed at **ending the age of fossil fuels**.

> ***In the next few years, the economic shape of the Net-Zero age will be firmly set. New markets will have been created, breakthrough clean technologies will have been innovated, developed, and brought to market, and our energy systems transformed.***
>
> European Commission, A Green Deal Industrial Plan for the Net-Zero Age. February 1, 2023.

The European Commission (EC) published an official proposal of the plan directed to the European Parliament on 1st February 2023. The following can be inferred as the four main pillars of the Green Deal Industrial Plan proposal: a predictable and simplified regulatory environment, faster access to sufficient funding, skills, and open trade for resilient supply chains.

The European Green Deal is expected to provide tax credits, accelerated depreciations and/or subsidies oriented to the Net-Zero age industry. Total funds for European climate change could be around **€390 billion**, of which **€250 billion** has already been approved for the **Plan for Recovery and Resilience**, €40bn will be mobilized by the **Horizon funding**, and a further €100 billion allocated to the **Just Transition Fund**. The EC also estimates that it will increase **EU Energy & Transport investment** by a **further cumulative €300bn by 2030 for REPowerEU targets**. Within this, the proposal identifies the need for €170bn investment in manufacturing of solar, wind, hydrogen, battery, and heat pump supply chains.

However, the proposal remains subject to change since it is still facing negotiation by member states. The principal objective is now to reach an agreement involving all the countries by providing fresh money and creating a **European Sovereignty Fund**, which is expected to be activated in the second half of this year.

Individual countries in Europe will subsidise green industries, including batteries, solar panels, wind turbines, heat pumps, electrolysers, carbon capture and storage, hydrogen, zero-emission vehicles and building energy performance. The proposal highlights that state aid can be higher if investments are in areas from which multiple members can benefit.

Conclusion

We believe that increased competition among the most prominent economies in the world is **beneficial to the Green Transition acceleration**, promoting the industries that can contribute in this shift toward Net-Zero. **Such industries will benefit greatly from the above-mentioned plans**, with the United States potentially positioned to dominate the clean technologies industry.

It is our view that Europe has the potential means and resources to obtain a leading position too, competing with China's technological development and market interventions. The key risk for Europe remains fragmentation: while waiting for a Sovereignty Fund, single member states have adopted a relaxed approach to the approval of individual responses, potentially undermining economic competition within country members. Fragmentation was already experienced after Russia's invasion of Ukraine, when the European Commission approved €672 billion of state aid under a crisis mechanism. More than two-thirds of the money has been allocated to the EU by Germany (53%) and France (24%), followed by Italy with just 7%, a situation which has led to tension and accusations of unfair competition between countries.

AUTHORS

Algebris Investments'
Sustainable World Team

NOTES

For more information about Algebris and its products, or to be added to our distribution lists, please contact Client Relations at: client.relations@algebris.com.

Visit Algebris Insights for past commentaries.

SOURCES

The source for all graphs is indicated near the graph.

The source of images is Adobe Stock unless indicated otherwise.

DISCLAIMER

London, Milan, Rome, Zurich, Dublin, Luxembourg, Boston, Singapore, Tokyo
www.algebris.com