

Financing Our Survival: Building a Nature Positive Economy through Subsidy Reform

**Brief for government and
business decision-makers**

Prepared by The B Team and Business for
Nature, based on a study from
Doug Koplow and **Ronald Steenblik**

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The world is spending at least \$1.8 trillion a year, equivalent to 2% of global GDP, on subsidies that are driving the destruction of ecosystems and species extinction.

Read the full technical report '[Protecting Nature by Reforming Environmentally Harmful Subsidies: The Role of Business](#)'.

This project is co-funded by [The B Team](#) and [Business for Nature](#)



Summary

Unless we start to bring awareness, transparency and disclosure on subsidies from both governments and business we are continuing to finance our own extinction.

This brief summarizes the headlines from a study by Doug Koplow and Ronald Steenblik, who were commissioned by The B Team to undertake a broad review of the different types of environmentally harmful subsidies (EHS) across sectors and estimated a total value. Their study estimates that the world is spending at least **\$1.8 trillion a year**, equivalent to 2% of global GDP, on subsidies that are driving the destruction of ecosystems¹ and species extinction.

This research is timely ahead of key political events, including the UN Convention on Biological Diversity (CBD COP15), G7, G20 and United Nations Framework Convention on Climate Change (UNFCCC COP27) meetings, all of which present opportunities to include environmentally harmful subsidy reform in international and national policy measures.

In the context of COP15 negotiations of the Post 2020 Global Biodiversity Framework, countries are discussing a new target to address this challenge. **The current \$500 billion per year target on subsidy reform needs to be strengthened to reflect the latest research and commit governments to redirecting, repurposing or eliminating all environmentally harmful subsidies by 2030.**



Call to action for governments at the UN CBD:

Adopt a clear and ambitious target within the Global Biodiversity Framework at the UN Convention on Biological Diversity (CBD COP15) that commits governments to redirect, repurpose, or eliminate all environmentally harmful subsidies by 2030 and increase positive incentives to enable an equitable, net-zero, nature-positive world.

The case is clear: reforming the \$1.8 trillion a year of subsidies that are harming the environment could make an important contribution towards unlocking the over \$700 billion a year needed to reverse nature loss by 2030² as well as the cost of reaching net zero carbon emissions by 2050. This needs to happen alongside aligning all private financial flows to nature-positive and increasing public and private finance to deliver innovative financial solutions that help protect, restore and conserve nature.

What are Environmentally Harmful Subsidies?

Environmentally harmful subsidies (EHS) are government programs that encourage unsustainable production or consumption, and in doing so harm nature by exhausting natural resources, degrading global ecosystems, and damaging planetary health. These subsidies were established with good intent: to promote economic access and solve social issues such as food security, or improve access to energy and clean drinking water. However, **often the intended social goal of subsidies has been pursued without consideration of their environmental impacts.** This siloed approach has contributed to the many crises afflicting the natural world, placing livelihoods and economies at risk.

A few other things to know about EHS:



They come in different shapes and sizes.

While subsidies often take the form of cash payments, they also include government provision of credit, liability caps, special tax breaks or regulatory exemptions, or below-market provision of publicly owned goods or services.



They can be found across the whole economy.

Sectors in which EHS are prevalent include agriculture, construction (including housing), forestry, fossil fuels, marine capture fisheries, transport, and water. These sectors account for the vast majority of greenhouse gas emissions and impact ecosystems.



They are devilishly difficult to reform.

Many of these subsidies are so deeply embedded in our economies that attempts to define, measure and track them often struggle to be comprehensive, and progress to reform them has been slow. This is due not only to the power of vested interests, but also because both the governments and beneficiaries – including business – are unaware of the full scale of the subsidies and their impacts. Businesses often lobby for continued or increased government support that often has negative unintended environmental consequences.

What impact are these subsidies having?

The World Economic Forum ranks climate action failure, extreme weather and biodiversity loss as the top three threats facing humanity³, fuelled in part by the large scale of public money flowing to harmful industries and practices.

Research also shows that subsidies are contributing to major global challenges including climate change, nature loss and social inequalities. A United Nations Development Programme and Food and Agriculture Organization report suggests that almost 90% of the subsidies given to farmers every year are price distorting or harmful⁴ and though some fossil fuel subsidies help address energy poverty, most impede the necessary transition towards cleaner energy.⁵

We have never lived on a planet with so little biodiversity as today. An Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) report showed nature is declining globally at 'unprecedented' rates and that a 'massive' reduction in harmful subsidies is necessary to reverse the catastrophic loss of species.

What is the scale of the challenge?

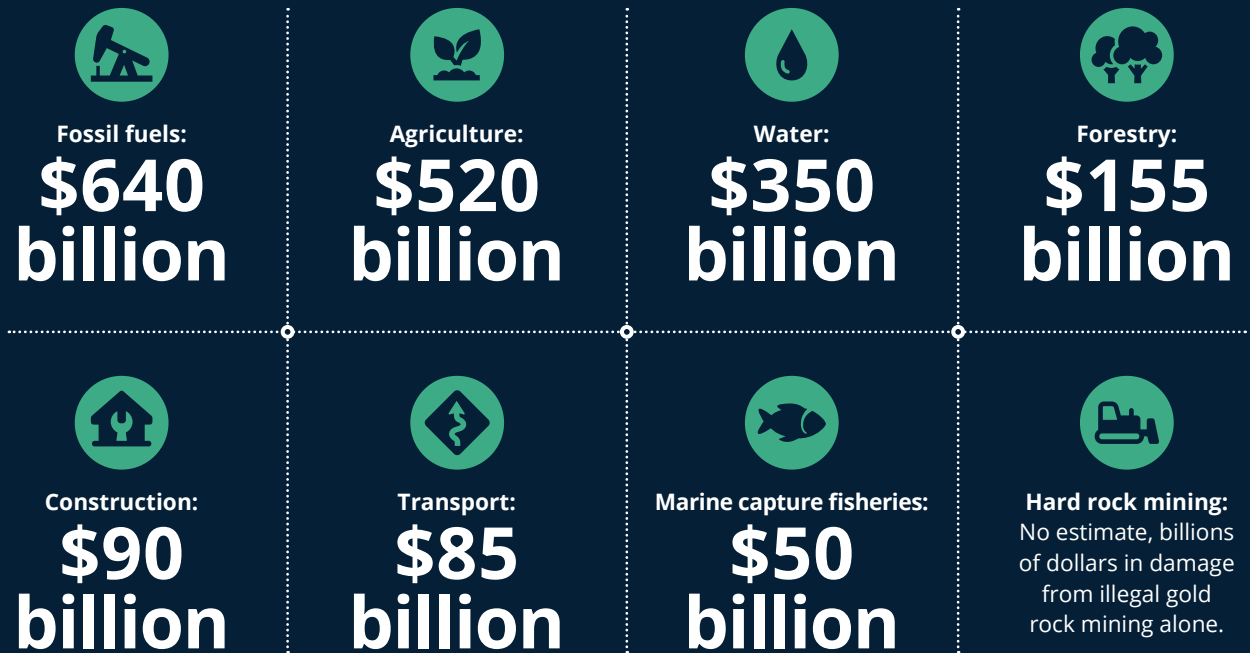
The scale and nature of EHS demonstrate the size of the challenge and the potential opportunities reform provides, in particular in scaling up sustainable finance. While data availability varies widely across sectors and countries, it is estimated that these subsidies amount to at least \$1.8 trillion per year. This is roughly 2% of global GDP.

New research shows that the world is spending

\$1.8 trillion

per year, equivalent to 2% of global GDP, on environmentally harmful subsidies.

Industries in order of amount of subsidies received (in USD/year):



These subsidies are all contributing to air and water pollution, climate change, biodiversity loss, land degradation, and global inequality.



Breakdown of EHS estimates across each area and the impact

- The fossil fuel, water and agriculture industries are among the most polluting and environmentally harmful sectors and combined benefit from more than 80% of EHS per year.
- **Fossil fuels – \$640 billion a year.**⁶
Fossil fuel subsidies contribute to air and water pollution, land subsidence, climate change, and road damage.
- **Agriculture – \$520 billion a year.**⁷
The environmental damage of unsustainable agricultural activities includes soil erosion, water pollution, commodity-driven deforestation, greenhouse gas emissions, conversion of natural habitats, biodiversity loss, and an over-concentration of staple crops in a handful of genetic lines, which disrupts and damages native ecosystems.

- **Forestry – \$155 billion a year.**⁸
Illegal logging and subsidies for unsustainable forest land management and the production of forest-derived products encourage biodiversity loss, monoculture plantations, a loss of carbon sequestration, and a decline in soil fertility.
- **Water – \$350 billion a year.**⁹
Subsidies do little to incentivize the sustainable use of freshwater and the management of water and wastewater infrastructure, contributing to groundwater depletion, water pollution and risks to ecosystems in waterways and the ocean.
- **Construction (including housing) – Greater than \$90 billion a year.**¹⁰
The environmental and social impacts of construction include farmland and forest land conversion, greenhouse gas emissions, biodiversity loss, and water pollution.

- **Transport – Greater than \$85 billion/year.**¹¹
Transport infrastructure, vehicles, and parking, all contribute to greenhouse gas emissions, habitat loss and fragmentation, and watershed damage.
- **Marine capture fisheries – \$50 billion/year.**¹²
Marine capture fisheries subsidies give incentives to overfishing, as well as doing little to improve regulation of bycatch and damaging harvesting techniques.
- **Hard rock mining – no estimate of the total amount of EHS.**
Widespread illegal gold mining causes billions of dollars in environmental damage each year. Hard rock mining contributes to road damage, air and water pollution, land subsidence, as well as putting fisheries and tourism at risk in certain locations.

Why has progress been so slow?

The follow-through on global and government pledges to eliminate harmful subsidies to date has been poor. During the 2010 UN CBD Summit, 190 countries committed to phasing out or reforming subsidies harmful to biodiversity by 2020 as part of the Aichi targets. Governments missed the target, and we cannot afford for history to repeat itself.

This has been coupled with a lack of cross-industry standards and mandatory compliance to stem the flow of finance into EHS.

But the tide is changing, with some industry-specific improvements and commitments occurring, such as governments pledging to phase out “inefficient” fossil fuel subsidies at COP26 in Glasgow.¹³

The benefits of redirecting harmful subsidies towards nature positive outcomes

- Free up substantial government resources to support social needs and local livelihoods.
- Redirect capital towards ecological restoration, including nature-based solutions.
- Close the biodiversity finance gap by reducing environmental degradation and unlocking the funding needed to mitigate it.
- Send more accurate signals to public and private investors and producers on where to direct R&D efforts and future investments.
- Accelerate innovation to reduce greenhouse gases and environmental damage.
- Create a level playing field for businesses, which would further encourage rapid transformation of business models.
- Unlock social benefits such as poverty reduction, improvements in education and other social services, and more sustainable approaches to providing basic access to energy, clean air and water.



Greater transparency will ensure a just and equitable transition for all

A radical and systematic reform of all subsidy systems is a complex challenge, but one that presents a wealth of opportunities for governments, businesses and investors. But it needs to be handled carefully and intelligently to account for the full potential impacts. Subsidy reform must be mindful of the various economic and social forces that work to maintain them and the political economy of reform, as well as the imperative for a just transition.

It is essential that governments place social and environmental considerations at the heart of reform. People are already facing rising energy and commodities prices and inflation. Reform managed sensitively means providing support for the poorest households and most vulnerable communities, such as via targeted cash transfers. This is particularly challenging in countries with low capacity to administer welfare payments.

Greater transparency is a prerequisite to ensuring effective and accountable EHS reform. Managing subsidy reform in a sensitive and sustainable manner will require a deep understanding of the full financial flows of subsidies.

How can we create greater transparency?

- Establishing agreed criteria for determining when a subsidy is, on balance, environmentally harmful will be helpful. Yet, it's important to note, the lack of such criteria is not an excuse for inaction.
- Instead, the focus should be disclosure of all subsidies in the first instance, which will allow experts to determine which constitute environmentally harmful impacts and which do not. This in turn will result in a more accurate definition based on evidence as well as help map subsidies flows.
- A clear and universal monitoring process, both of the governments distributing subsidies and of the beneficiaries, in particular businesses, receiving them. Such monitoring must happen across all sectors and over political boundaries.



Calls to action for businesses and investors:

1

Advocate for governments to reform subsidies by redirecting, repurposing, or eliminating environmentally harmful subsidy towards an equitable, net-zero and nature positive world by 2030.

2

Collaborate across all sectors of society to **raise awareness** of the competitive, reputational and investor advantages from subsidies **disclosure** and champion actions for subsidy reform.

3

Support the development of international standards, frameworks and guidance for mandatory ESG disclosure which includes subsidies.

The business case for subsidy reform

The risks

Businesses rely on nature at every stage of the value chain, therefore receiving and lobbying for subsidies that harm nature is not sustainable. EHS also:

- Distort market prices, resource allocation and investment decisions.
- Encourage unsustainable production and consumption in the economy and create unfair competition.
- Create operational, supply chain and reputational risks for businesses.

The opportunities

Subsidy reform would:

- Support the ambitions of the Paris Climate Agreement.
- Increase competitive positioning.
- Boost ESG-motivated investor interest.
- Reduce reputational, supply chain and operational risks.

Informed reform of subsidies can boost business and investment opportunities, create jobs, reverse nature loss and help ensure a sustainable future for our planet. Businesses can mobilize and implement change with speed (often faster than policy-makers), setting a precedent for improvement across industry. **Investors are starting to acknowledge**¹⁴ the financial and sustainability risks of environmentally harmful subsidies and forward-looking companies **recognize they need to prepare for subsidy reform**¹⁵.

However, addressing the challenge cannot be achieved by individual stakeholders alone; radical collaboration is needed from across the private sector, governments and civil society.

We need to see thorough subsidy reform from governments and business to ensure a just and equitable transition for all.

Mary Robinson,
Former President of Ireland;
Chair of the Elders;
Member, The B Team

This is a moment where business and governments need to urgently collaborate to tackle the challenge of environmentally harmful subsidies.

Yolanda Kakabadse,
Former president,
World Wildlife Fund International;
Member, The B Team

Harmful subsidies must be redirected towards protecting the climate and nature, rather than financing our own extinction.

Christiana Figueres,
Former Executive Secretary of the UNFCCC;
Member, The B Team

Globally, we must redirect environmentally harmful subsidies toward investment in natural capital and sustainable practices.

André Hoffmann,
Vice Chair, Roche Holding AG;
Member, The B Team

A systematic reform of all subsidy systems is a complex challenge, but one that presents a wealth of opportunities for governments, businesses and investors.

Sharan Burrow,
General Secretary of the International
Trade Union Confederation;
Vice Chair, The B Team

We have an opportunity to courageously join forces to shape a smart transition that will incentivize clean energy and the protection of nature.

Jean Oelwang,
Founding CEO and President, Virgin Unite;
Member, The B Team

Environmentally harmful subsidies in business stand in the way of every effort to tackle climate change and protect our planet's fragile ecosystems.

Richard Branson,
Founder of the Virgin Group;
Co-founder, The B Team

Together, business and government have an opportunity to reform and redirect \$1.8 trillion of environmentally harmful subsidies to accelerate a just transition for people and the planet.

Jesper Brodin,
CEO, Ingka Group (IKEA);
Chair, The B Team

It's time to stop the self-serving, short-sighted lobbying instead directing public money towards supporting responsible companies transition to nature positive business models.

Paul Polman,

Business leader, campaigner,
and co-author of "Net Positive";
Member, The B Team

I strongly believe this timely report will help generate the requisite political momentum and contribute to the global biodiversity framework.

Elizabeth Mrema,

Executive Secretary,
Convention on Biological Diversity

Humanity's dependency on nature's ecosystems is not currently reflected in our markets or institutions. As businesses we have an important role to play in catalyzing the system change.

Roberto Marques,

Executive Chairman and CEO,
Natura &Co

We welcome this impactful work around building a nature positive economy through subsidy reform. Business can, and must, support governments in the creation of policy environments that can accelerate transformation - and business is ready to do so.

Peter Bakker,

President and CEO,
World Business Council for
Sustainable Development

It is more important than ever to put in place ambitious targets to reverse nature loss and to redirect, repurpose or eliminate all subsidies that harm our natural world.

Marco Lambertini,

Director General,
WWF International

We must break down the siloed approach that has led to putting subsidies in place without consideration of their long-term environmental costs.

Jennifer Morris,

CEO,
The Nature Conservancy

As a multi-stakeholder collective of businesses across G20 countries, the B20 Indonesia fully commits to following through with this agenda.

Shinta Kamdani,

CEO,
Sintesa Group;
Chair of the B20 Indonesia

Reforming, repurposing, and redirecting \$1.8 trillion of subsidies has the potential to ensure the creation of a level playing field for businesses globally.

Wiebe Draijer,

Chairman of the Managing Board,
Rabobank

Footnotes

- ¹ The IMF has estimated that fossil fuel subsidies were \$5.9 trillion in 2020, but the bulk of that number refers to the cost of selected externalities. **The Dasgupta Review (2021)** estimated \$4-6 trillion for multiple sectors, but this figure includes the IMF estimates and represents subsidies as a whole and did not single out the environmentally harmful component.
- ² Financing Nature: Closing the Global Biodiversity Financing Gap by the Paulson Institute, The Nature Conservancy and Cornell (2020) estimates that \$711 billion is needed annually to close the biodiversity financing gap.
- ³ Global Risks Report 2022, World Economic Forum (2022)
- ⁴ A multi-billion-dollar opportunity – Repurposing agricultural support to transform food systems, UN FAO (2021)
- ⁵ Still Not Getting Energy Prices Right: A Global and Country Update of Fossil Fuel Subsidies, IMF (2021)
- ⁶ Based on most recent estimates for consumer subsidies from IEA (2021) and the OECD's total support estimates (2019), adjusted to remove overlaps. Data from 2020 are not representative of long-term trends due to severe covid-related dislocations, so were not used.
- ⁷ The FAO/UNDP/UNEP (2021) estimate that \$470 billion of agricultural subsidies are “price distorting or harmful to nature and health” (87% of all agricultural subsidies). This figure has been scaled to 2021, using a conservative 2016 midpoint, to reach \$522 billion.
- ⁸ Value of illegally harvested wood; based on Interpol (2020) and the World Bank (2021). No global data on other subsidies to forestry.
- ⁹ Midpoint of range in World Bank analysis (Andres et al. 2019). Does not include subsidized water through direct withdrawal by industrial, power, and agricultural users.
- ¹⁰ Estimate is from two US tax breaks for single family homes alone. Federal debt insurance for single family homes exceeded multi-family by a 10:1 ratio.
- ¹¹ Some potential overlap between OECD producer subsidy inventory for fuel tax reductions. Because this estimate reflects a narrow set of available studies, the actual level of subsidies to expanded transport infrastructure and subsidizing bulk commodity movements is anticipated to be much larger.
- ¹² Estimate is roughly half from subsidies to excess capacity and overfishing (Skeritt and Sumaila, University of British Columbia and Oceana 2021) and half from illegal fishing (mid-point of World Bank 2021 estimate).
- ¹³ https://unfccc.int/sites/default/files/resource/cop26_auv_2f_cover_decision.pdf
- ¹⁴ 733 institutional investors signed an ambitious statement to governments ahead of COP26, calling for a number of measures that would help avoid catastrophic temperature rise and manage climate risk. <https://www.ceres.org/news-center/press-releases/733-investors-more-us52-trillion-issue-strongest-ever-unified-call>
- ¹⁵ 11 CEOs call for governments to eliminate and redirect all harmful subsidies. <https://www.businessfornature.org/open-letter-cop15>

This brief summarizes the headlines from a study by Doug Koplow and Ronald Steenblik released in February 2022.

Doug Koplow is the founder of Earth Track in Cambridge, MA. For more than 30 years, his work has focused on government subsidization of natural resources, including energy, water and water treatment, and primary materials. Doug has helped improve subsidy measurement and document the pervasive reach and enormous scale of these subsidies, particularly in the energy sector.

Ronald Steenblik is a non-resident senior fellow with the Global Subsidies Initiative of the International Institute for Sustainable Development. Until 2018 he was the OECD's Special Counselor for Fossil Fuel Subsidy Reform. Ronald has worked on measuring and providing policy advice on subsidies to agriculture and biofuels, marine capture fisheries, primary plastics, and fossil fuels.

Read the full technical report '[Protecting Nature by Reforming Environmentally Harmful Subsidies: The Role of Business](#)' including the background, objectives, methodology and results.

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The authors have taken care to ensure the material presented in this report is accurate and correct. The authors do not guarantee the accuracy of the data or material contained in this report, and accept no legal liability or responsibility connected to its use or interpretation.



The report draws on previous work to identify subsidies in different sectors. Some of them have been well researched and there are several different figures and methodologies for each sector, which results in discrepancies in the total values. For example, the IMF has estimated that fossil fuel subsidies were \$5.9 trillion in 2020, but the bulk of that number refers to the cost of selected externalities. The Dasgupta Review estimates \$4-6 and \$5-7 trillion for multiple sectors, but this figure includes the IMF estimates and represents subsidies as a whole, rather than singling out the environmentally harmful component, as this new study seeks to do.

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