ROSA LUXEMBURG STIFTUNG
NEW YORK OFFICE

TUED Working Paper 16

# Beyond Recovery: The Global Green New Deal and Public Ownership of Energy

## Trade Unions for Energy Democracy


Published by the Rosa Luxemburg Stiftung, New York Office, July 2023
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Cover and interior photo: Adobe Stock Images
With support from the German Federal Ministry for Economic Cooperation and Development (BMZ).

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# Beyond Recovery: The Global Green New Deal and Public Ownership of Energy

This paper examines the ongoing and closely related discussions on global public goods (GPGs) and the idea of a Global Green New Deal (GGND). It focuses specifically on the energy transition and climate protection dimensions of these discussions.

The paper attempts to explain why a GGND *of the left* (hereafter, the term "left GGND" is used for convenience) must make a clean break with the current neoliberal policy which, since the COVID pandemic, has been perpetuated and reinforced by "recovery economics." From a working-class perspective, "recovery" is better than austerity, but it will do nothing to address climate change or meaningfully advance the transformative goals of a left GGND.

The development of a viable left GGND has been impeded by its advocates' imprecise and undiscerning emphasis on "more investment" in renewable energy and other green sectors (storage batteries, electric vehicles, etc.) This approach to investment (including public investment) displays a lack of awareness of the deep crisis in neoliberal climate policy, which expresses itself in inadequate levels of investment in the energy transition, the policy

debacle known as "carbon pricing," and the failure of countries (including the largest emitters) to meet their emissions reduction targets under the Paris Agreement.[1] Briefly interrupted by the economic impacts of the COVID pandemic, emissions are set to hit record levels in 2023.[2]

The lack of awareness of both the extent and the root causes of the crisis in neoliberal climate policy means that many GGND advocates have yet to fully engage in a rigorous interrogation of the current approach to investment. Such an interrogation would dispel any sense that the current approach is in any way compatible with what a left GGND aspires to achieve. The current neoliberal emphasis is on "de-risking" private investment, whereby public money makes profitable what would not otherwise be profitable. This means that "more public investment" will simply perpetuate the same failed approach, while securing more profit for the private sector. It will not bring about the kind of changes in the energy system that decarbonization will require, and may even make matters worse.

This mistake must be corrected before a left GGND can be considered a legitimate alternative to the current neoliberal approach. A left GGND must view public investment as a means to extend public ownership, with energy systems and critical supply chains being a priority target. A commitment to public ownership will allow a left GGND to distinguish itself from run of the mill recovery economics. More important, it will give a left GGND greater power and scope to radically change the political economy. Public finance and investment must be deployed in ways that serve this end.

This paper also devotes considerable attention to illustrate and explain why neoliberal climate policy has barely changed since the early 1990s. Importantly, its durability has nothing to do with its record of success; rather, it can be attributed to its proponent's ability to conceal its defects. The 25-year push to price carbon to reduce emissions has been a policy disaster. Equally telling, neoliberal policy has not created self-sustaining markets in "low carbon solutions" and these solutions remain subsidies dependent.[3] And while the pervasiveness of subsidies may reduce economic risk to green companies, they add political risk to the transition itself by inflating costs, draining public budgets, and increasing the burden on end users. And despite the commitment to de-risking private investment, the overall level of capital committed to the transition to a low carbon future is, as the IEA and others have noted, not even close to being on track to reach climate targets.[4] Meanwhile, when annual reductions in emissions should be falling

1 UNEP, *Emissions Gap Report 2020*, at www.unenvironment.org/resources/emissions-gap-report-2020.
2 IPCC, *Sixth Assessment Report*, August 2021, at www.ipcc.ch/report/ar6/wg1.
3 IEA, World Energy Investment 2019: Webinar, 14 May 2019, at https://youtu.be/ZulVjHW7n5k.
4 For inadequate investment levels, see: Energy Transition Commission, Financing the Transition: How

dramatically, the opposite is happening.[5] Briefly interrupted by the economic impacts of the COVID pandemic, emissions are set to hit record levels in 2023. And most countries (including the largest emitters) are not on course to meet their initial Nationally Determined Contributions under the Paris Agreement.[6] Neoliberal policy can therefore be described as a *resilient failure.*

## Climate-Related Public Goods

The basic idea of public goods is simple: No person can be excluded from using the "good" in question, and one person's use of the good does not prevent others from doing the same. Thus, the main properties of public goods are nonrivalry and nonexcludability. For example, a person crossing the street because of the presence of a traffic light does not compromise the light's utility for other persons who may also wish to cross the street. The light's benefits are, therefore, nonrivalrous. By the same token, it would be extremely difficult to restrict the use of light to one person or group, which means that no person can, for all practical purposes, be prevented from taking advantage of the traffic light. Its benefits are, therefore, nonexcludable. The traffic light, therefore, is a public good.[7]

A public goods approach to climate change mitigation can perhaps be expressed in one sentence: Increasing emissions anywhere endangers people everywhere; reducing emissions anywhere benefits people everywhere. Adaptation to climate change also qualifies as a public good, in that effective adaptation measures—such as making buildings more climate resilient—will not just help protect occupants from the effects of floods and tropical storms, but the containment of havoc and hardship will, in principle, make the world a better and safer place for all.[8]

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to Make the Money Flow for a Net Zero Economy, March 2023, at www.energy-transitions.org/publications/financing-the-transition. See also Nicholas Stern, *The Stern Review: The Economic of Climate Change*, November 2006, at www.hm-treasury.gov.uk. Also see Nicholas Stern, *New Climate Economy, Unlocking the Inclusive Growth Story of the 21st Century: Accelerating Climate Action in Urgent Times*, 2018. According to Stern: "The evidence today shows that climate action is even more attractive than we imagined then [in 2006 when the Stern Review was published]. This remarkable new growth opportunity is now hiding in plain sight." Investors, warns Stern, risk missing a massive economic opportunity. "The train is fast leaving the station. Leaders are already seizing the exciting economic and market opportunities of the new growth approach…. Over US$26 trillion and a more sustainable planet are on offer, if we all get on board. The time to do so is now." p. 2.

5 IPCC, *Sixth Assessment Report*, August 2021, at www.ipcc.ch/report/ar6/wg1.

6 UNEP, *Emissions Gap Report 2020*, at www.unenvironment.org/resources/emissions-gap-report-2020.

7 This example of a public good is discussed in Inge Kaul, et. al., 'Global public goods: international cooperation in the 21st century', United Nations Development Programme, 1999.

8 Stern Review, p. 554. "The international community should also support adaptation through investment in global public goods, including: improved monitoring and prediction of climate change; the development and deployment of drought- and flood-resistant crops; methods to combat land degradation; better modelling of impacts..."

# The Second Coming of the Green New Deal

The idea of a Green New Deal (GND) made headlines In February 2019 following the political intervention of US House Representative Alexandria Ocasio-Cortez. Along with Senator Ed Markey, Ocasio-Cortez submitted an aspirational resolution to the US Congress that instructed the Federal government "to achieve net-zero greenhouse gas emissions through a fair and just transition for all communities and workers; to create millions of good, high-wage jobs and ensure prosperity and economic security for all people of the United States." This would require "a 10-year national mobilization" that would need to be "on a scale not seen since World War II and the New Deal."[9]

This was not the first time the term Green New Deal had been used, either in the US or elsewhere. The global financial crisis of 2007 led to calls for a GND in several developed countries and the United Nations Environment Programme (UNEP) proposed a Global Green New Deal (GGND) in 2009.[10] However, in contrast to these earlier proposals, Representative Ocasio-Cortez's initiative was clearly associated with the political left, and correctly so. Ocasio-Cortez's democratic socialist convictions, alongside the Congressional resolution's attempt to connect climate protection with core working-class issues (access to health care, decent wages, etc.) distinguished it from the GND proposals of the late 2000s.

The radical aspirations expressed in Ocasio-Cortez's initiative would soon resonate at the global level, giving further impetus to calls for changes in global governance and economic management through what is often termed "the multilateral system" embodied in institutions like the United Nations, the International Monetary Fund (IMF), the World Bank and the World Trade Organization (WTO).[11] Along these lines, in July 2019, the UN Conference on Trade and Development (UNCTAD) proposed that a GGND designed to deliver GPGs must be accompanied by major changes in global governance—a "new multilateralism."[12] Echoing Ocasio-Cortez's vision of

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9 US House of Representatives Resolution, H.Res.109 — 116th Congress (2019-2020), at www.congress.gov/bill/116th-congress/house-resolution/109/text.

10 UNEP, "A Global Green New Deal", 2009; N. Robins, R. Clover & C. Singh, "A climate for recovery: The color of stimulus goes green."

11 United Nations, Inter-agency Task Force on Financing for Development, Financing for Sustainable Development Report, 2019, New York, available at https://developmentfinance.un.org/fsdr2019; UNCTAD/Boston University, A New Multilateralism for Shared Prosperity: Geneva Principles for a Global Green New Deal, at https://unctad.org/webflyer/new-multilateralism-shared-prosperity-geneva-principles-global-green-new-deal. See also: UNCTAD, Reforming the International Trading System for Recovery, Resilience and Inclusive Development, UNCTAD Research Paper No. 65, UNCTAD/SER.RP/2021/8.

12 UNCTAD and Boston University, A New Multilateralism for Shared Prosperity: Geneva Principles for

a GND, UNCTAD's global version stated that a left GGND must be based on, "increased public investment, minimum wages reflecting living costs, stronger collective bargaining institutions and universal comprehensive social protection are needed at the same time as rapid decarbonization."[13]

Following the onset of the COVID-19 pandemic in early 2020, calls for a GGND and a commitment to GPGs intensified.

In July 2020, UN Secretary-General António Guterres declared, "The global political and economic system is not delivering on critical global public goods: public health, climate action, sustainable development, peace…we need a New Global Deal to ensure that power, wealth and opportunities are shared more broadly and fairly at the international level."[14] Other public figures referred to the COVID crisis and the climate threat as symptoms of a systemic disfunction expressed in the multilateral system's failure to advance equality, protect health, and deliver on climate targets.[15] In May 2021, the Independent Panel for Pandemic Preparedness and Response, co-chaired by former New Zealand Prime Minister Helen Clark, pointed to the urgent need to shift "from a market model to one aimed at delivering global public goods" and for a "fundamental transformation" of global governance.[16] In August 2021, UN Secretary-General Guterres appealed to governments to work together to "strengthen the governance of our global commons and global public goods" and to facilitate the start of "a new era of universal social protection, health coverage, education, skills, decent work and housing." [17]

Progressive voices (including unions) called on governments to use their fiscal powers to lock in a sustained and durable economic recovery accompanied by more lasting changes in the policies of the multilateral institutions, including the World Bank and the IMF. Aware of the fact that the government stimulus packages put in place during the financial crisis of 2007 soon gave way to damaging and socially regressive austerity measures, UNCTAD and others urged governments to not repeat the same mistake, and to instead use the COVID crisis to bring about lasting change.

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a Global Green New Deal, at https://unctad.org/webflyer/new-multilateralism-shared-prosperity-geneva-principles-global-green-new-deal. See also: UNCTAD, Reforming the International Trading System for Recovery, Resilience and Inclusive Development, UNCTAD Research Paper No. 65, UNCTAD/SER.RP/2021/8.

13 UNCTAD, Reforming the International Trading System for Recovery, Resilience and Inclusive Development, UNCTAD Research Paper No. 65, UNCTAD/SER.RP/2021/8.

14 Annual Lecture 2020: Secretary-General Guterres's full speech, at www.nelsonmandela.org/news/entry/annual-lecture-2020-secretary-general-guterress-full-speech.

15 Annual Lecture 2020: Secretary-General Guterres's full speech at, www.nelsonmandela.org/news/entry/annual-lecture-2020-secretary-general-guterress-full-speech.

16 The Independent Panel for Pandemic Preparedness & Response, 'COVID-19: Make it the Last Pandemic', at https://theindependentpanel.org/expert-independent-panel-calls-for-urgent-reform-of-pandemic-prevention-and-response-systems.

17 United Nations, *Our Common Agenda – Report of the Secretary-General*, August 2021, at www.un.org/en/content/common-agenda-report/assets/pdf/Common_Agenda_Report_English.pdf.

UNCTAD'S described its GGND as a global program of "redistribution and recovery" built around the economic, social, and environment benefits that could accrue from rapid decarbonization.[18] Under such a program, developing countries would be better situated to "leapfrog" carbon-intensive industrialization while developed countries could "sustainably accelerate their transition to renewable energy use."[19]

## Unanswered Questions

But what exactly is it about a left GGND that distinguishes it from those proposed by the pro-market neoliberal "green growth" mainstream?[20] Making use of the international interest in Ocasio-Cortez's initiative, the EU's Green Deal for Europe was announced in 2019 and it, too, situated government investment at the heart of the proposal.[21] UNEP's 2009 GGND had done the same, as did the Obama Administration's American Recovery and Reinvestment Act.[22] GND proposals may come from the left, but what is it about those proposals that are unambiguously left?

Put differently, what is it about the current climate and energy policy framework that needs to change to be compatible with a left GGND? Does "bold action on climate" mean that the existing climate and energy transition policies should simply be pursued more aggressively? Or does realizing the goals of a GGND require a clean break with those same policies? Within the left, these and similar crucially important questions are not always answered in a clear and direct way.

The same questions that must be asked of a left GGND must also be addressed when considering what it might take to deliver climate- and energy-related GPGs. Yes, governments must individually and collectively commit to facilitating their delivery. But how can they execute such an enormous task, especially when the capacities of many low- and middle-income countries have been depleted by neoliberal structural adjustment programs and austerity? Neoliberals have for more than thirty years insisted that carbon pricing and/or carbon markets are, or will be, the main policy

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18 UNCTAD, Reforming the International Trading System for Recovery, Resilience and Inclusive Development, UNCTAD Research Paper No. 65, UNCTAD/SER.RP/2021/8.

19 Ibid.

20 European Commission, The European New Green Deal, December 2019, at https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en.

21 The European Green Deal is also our lifeline out of the COVID-19 pandemic. **One third of the €1.8 trillion** investments from the Next Generation EU Recovery Plan, and the EU's seven-year budget will finance the European Green Deal.

22 H.R.1 American Recovery and Reinvestment Act of 2009, at www.congress.gov/bill/111th-congress/house-bill/1/text.

vehicle to deliver climate stability as a crucial GPG.[23] Seldom questioning the core ideas behind the so-called "polluter pays principle," many on the left agree with carbon pricing as long revenues from the sale of pollution permits are distributed in progressive ways.[24] But the main question—does carbon pricing reduce emissions?—is rarely raised. From this we can conclude that many on the left assume that it is a sensible policy and would support its introduction if the working class or economically excluded groups could somehow benefit from the proceeds.

## Make it Left

This paper argues that a left GGND must forge an operational link between public investment and public ownership. It must situate public spending at the heart of a strategy to rebuild state assets in key areas of the economy—particularly the energy sector and, within it, electricity systems and their key technology supply chains. This will ensure that governments are better positioned to advance an economy-wide energy transition in ways that can control and then reduce emissions while also addressing joblessness, inequality, and other social problems. It can set the stage for the kind of sweeping interventions in the political economy that are needed to address climate change, confront the political power of fossil fuel interests, and intercept the dynamics of "endless growth" capitalism. The current approach can do none of these things.

The paper suggests that, if a left GGND is to deliver climate and energy-related GPGs, it should consist of three pillars:

- global governance reform
- the revitalization of public finance
- a clear commitment to the extension of public ownership, with energy being a priority sector.

The first two pillars—which are the product of years of activism and advocacy generated by a diverse array of social movements fighting for global justice—have already been quite well developed and feature quite

23 Carbon pricing refers to policies that raise the price of fossil fuels by charging money for emitting carbon dioxide into the atmosphere. This can be done directly by means of a carbon tax (a fixed price per ton of CO2) or indirectly by means of a carbon cap (a direct limit on the total amount of CO2 that can be emitted, with permits issued up to that limit).

24 James K. Boyce, Michael Ash, Brent Ranalli, Environmental Justice and Carbon Pricing, Political Economy Research Institute, University of Massachusetts, Working Paper Series, No 562, September 2022, at https://peri.umass.edu/economists/james-k-boyce/item/1644-environmental-justice-and-carbon-pricing.

prominently in left discussions on a GGND.[25,26] However, the third pillar—public ownership—has yet to be constructed.

## The Structure of this Paper

**Part One** summarizes the case for public ownership of energy. Previous TUED papers have drawn attention to the multiple failures of neoliberal climate and energy policy and the need for a public pathway alternative anchored in the public ownership of energy.[27] It not possible to re-state the case for public ownership here, at least not in full. As noted above, on the question of ownership, many advocates of a left GGND are indifferent, agnostic, and sometimes hostile. Part One attempts to explain *why* public ownership is essential, and why an undiscerning approach to investment cannot deliver climate- and energy-related GPGs.

**Part Two** draws further attention to a common feature of discussions on a left GGND, namely, their lack of attention to public ownership. GGND advocates are comfortable talking about public *investment*, but they are not inclined to discuss investment in ways that might facilitate both the expansion of state assets and the capacity of governments to act. Most GGND advocates agree that a GGND will require a series of radical transformations of key economic sectors (particularly energy). But to what extent might this require the extension of public ownership? This question is given little or no attention. It is as if the transformative goals of a GGND—including a much-needed "energy revolution"—can be achieved without upsetting the current balance between private capital and the state, which is today skewed towards the former.

**Part Three** explains how the idea of the "private provision of public goods" took hold in the early 1990s. During this period the investor-focused approach to climate change of the neoliberals came to dominate the UN negotiations around the Kyoto Protocols and the adoption of the UN's Framework Convention on Climate Change (UNFCCC). Anchored in several entrenched fallacies, this approach continues to influence climate policy in ways that are both enduring and damaging.

**Part Four** reviews some of the changes that have taken place in the multilateral system since the financial crisis of 2007. It consists of three

25 UNCTAD, Reforming the International Trading System for Recovery, Resilience, and Inclusive Development, UNCTAD Research Paper No. 65, UNCTAD/SER.RP/2021/8.
26 Ibid.
27 TUED, Working Papers Series, at www.tuedglobal.org/tued-working-papers.

subsections. The first subsection explains how neoliberal climate policy became closely associated with a green recovery agenda during the Great Recession that followed the crash. Although sometimes packaged as a GGND, the recovery agenda was, in fact, a continuation of the pro-market approach that had been in place since the Kyoto Treaty was negotiated in the 1990s. The recovery packages following the crisis of 2007 helped conceal the failures of neoliberal climate and energy transition policy in ways that are highly relevant to today's discussions.

The second subsection documents the corporate takeover of UN institutions from 2008 to the present. As Harris Gleckman notes, "During the past 10-15 years, efforts have been made to redesign the UN system and other multilateral processes along the lines of 'public-private partnerships.'" [28] As we will see, this has led to a situation where public institutions (including UNEP, the UNFCCC, etc.) cannot, or will not, question the designs and priorities of private corporations and financial interests. This means that calls for more public investment will, if implemented, merely increase the strength of the private sector while extending the life of the neoliberal policy framework that has been ineffective from a climate standpoint and regressive in terms of its impact on workers and communities.

The third subsection highlights some of the developments since the onset of the pandemic and the return of recovery economics. It documents the deepening crisis of the current policy framework and the problems with the investment regime built around blended finance. Advocates of a GGND need to be fully aware of the depth and severity of this crisis if they are to effectively advocate for a clear alternative. However, an investment-focused approach that neglects to prioritize public ownership will mask the failures of the current policy. It will raise hopes and expectations about "climate action" that will not be met, and it will compromise the role of governments as economic actors at a time when the situation demands decisive government interventions.

## Part One: Public Ownership and Climate: The Critical Role of the Power Sector

This section summarizes the case for public ownership of the power sector from a climate perspective. Advocates of a left GGND must be clear in terms

28 Harris Gleckman, *Multistakeholder Governance and Democracy: A Global Challenge*, (Routledge, 2018): p.11.

of why such an approach is essential, and why an undiscerning approach to investment cannot deliver climate- and energy-related GPGs. As noted above, previous TUED papers have drawn attention to the multiple failures of neoliberal climate and energy policy.29 These papers have made the case for reclaiming energy to full public ownership and why, from a climate perspective, it is absolutely necessary. Key supply chains for important technologies—including wind, solar, nuclear power, hydrogen, and capture technologies—must, TUED has argued, also be publicly owned if climate targets are going to be seriously pursued.

The climate case for public ownership has been built around the following points:

1. The generation of electricity is the largest single contributor to CO2 emissions. From a climate perspective, decarbonization of electricity supply is top priority, because any serious effort to drive an economywide transition to a low carbon and truly sustainable future will depend on changes in *how* electricity is produced. Markets have shown themselves to be incapable of delivering a clean energy system which is, undeniably, a global public good.[30]

2. Any attempt to decarbonize transport, heating and cooling, industrial processes, etc. must, we are told, involve generating a lot *more* electricity.[31] This poses several major challenges that have yet to be resolved. In the Global North, economywide decarbonization is proceeding quite slowly. But in the South (excluding China) it has barely started.[32] Potentially effective technologies are not being developed fast enough or they are not being developed at all.[33] Energy efficiency improvements are proceeding far too slowly, especially in the Global South.[34]

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29 TUED, Working Papers Series, at www.tuedglobal.org/tued-working-papers;

30 IRENA and Climate Policy Initiative (2023), Global landscape of renewable energy finance, 2023, International Renewable Energy Agency, Abu Dhabi, at www.irena.org/News/pressreleases/2023/Feb/Investments-in-Renewables-Reached-Record-High-But-Need-Massive-Increase-More-Equitable-Distribution.

31 In the US, electrifying other sectors of the economy, however, will require a three-fold expansion of the transmission grid and up to 170% more electricity supply by 2050, according to the National Academies of Sciences. See National Academies of Sciences, Engineering, and Medicine, *Accelerating Decarbonization of the U.S. Energy System*, Washington, DC: The National Academies Press, 2021, at https://doi.org/10.17226/25932.

32 For example, the sale of electric vehicles (excluding trucks) hit 10% of global light vehicle sales. China accounted for the largest increase. Together, China and Europe accounted for more than 85% of global electric car sales in 2021, followed by the United States (10%). See IEA, *Global EV Outlook 2022*, at www.iea.org/reports/global-ev-outlook-2022.

33 According to CEPS, "Technology deployment and innovation diffusion will thus necessitate investment on a very large scale. Companies, however, will only invest if there is a reasonable expectation of a profitable market. For low/zero-carbon industrial products that compete with currently available carbon-intensive alternatives, the question is: who will buy these products?" CEPS Policy Insight 2017/44 *Transforming Energy-Intensive Industries: Reflections on innovation, investment and finance challenges*.

34 See IEA, "Recommendations of the Global Commission for Urgent Action on Energy Efficiency,"

3. Hundreds of millions of people in the South lack any access to electricity, and many more lack clean energy for cooking and heating. But how can the lack of electricity be addressed? A GGND must take on the task of addressing energy poverty in ways that are consistent with economywide decarbonization.

4. Public ownership eliminates the profit motive and the costs of competition; uses national transmission and distribution systems and other infrastructure paid for by taxpayers; can take advantage of favorable interest rates for public borrowing, and deploy renewables and other forms of low carbon energy in a planned and responsible way. At the same time, public ownership can help in terms of addressing both national and global inequalities and, for many countries of the world, persistent levels of energy poverty.

## Comprehensive Reclaiming

Any effort to extend public ownership over power systems must target the large energy producers for renationalization and/or demarketization. Transitioning to low carbon energy will span several decades, regardless of the policies used to promote decarbonization. Given this technical reality, centralized and fully integrated power systems will be indispensable in any economywide decarbonization scenario. According to the IEA, "Despite the expected growth in decentralized generation and storage in more developed energy markets, the majority of electricity systems are likely to remain largely based on centralized generation and a robust transmission and distribution network for the foreseeable future."[35]

Previous TUED papers have used the term "comprehensive reclaiming" to express the reach of the renationalization and demarketization that is required, and to distinguish TUED's view of public ownership from those who believe that only a *partial* reclaiming is needed (for example, of distribution grids). These papers have attempted to show why municipal-level and local energy projects (known in some circles as "community energy") are not a proxy for public ownership. They may be beneficial to the communities that they serve but, in terms of their impact on power generation, their contribution is almost invariably peripheral.[36]

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June 2020, p. 12, at www.iea.org/reports/recommendations-of-the-global-commission-for-urgent-action-on-energy-efficiency. According to the IEA's Sustainable Development Scenario (SDS), energy efficiency will deliver more than one third of the total greenhouse gas emission reductions up to 2050.

35 International Energy Agency, at www.iea.org/reports/digitalisation. See also https://iea.blob.core.windows.net/assets/b1e6600c-4e40-4d9c-809d-1d1724c763d5/DigitalizationandEnergy3.pdf.

36 TUED, The Rise and Fall of Community Energy in Europe, 2020, at www.tuedglobal.org/working-papers/wp13.

When considering what comprehensive reclaiming of power systems might entail, it is worth remembering that many of the world's power companies remain partly or entirely publicly owned. Since the advent of neoliberal reforms in the 1980s and 1990s, the privatization of power *generation* has progressed. But in the ensuing decades, most power generation remains in full public hands. And most of the world's transmission and distribution companies remain fully public. When viewed in this light, reversing neoliberal reforms and repelling the incursions of private capital appears highly plausible.

Some of the objections to public ownership derive from the belief that state-owned energy companies are responsible for the world's current dependency on fossil fuels. Because coal and gas were the primary fuels converting heat into electricity, many associate fossil fuels with public ownership. However, there is no intrinsic connection between the two. For decades, power systems were almost invariably public, but public companies also harnessed hydroelectric and nuclear power alongside coal and gas. Public hydroelectric systems and nuclear power stations today contribute more than 25% to the world's total supply of electricity, with (mostly private) wind and solar currently contributing a little over 11%.

The world's fleet of nuclear power stations are nearly all publicly owned, and the 59GW of nuclear capacity that is currently under construction will be almost entirely public. And despite privatization pressures, state-owned companies have a growing presence in renewables. According to the OECD study, state-owned companies have "increased their market share in capacity additions of new renewables from 9% in 2000 to 23% in 2014."[37]

## The Impact of Marketization on Public Companies

Since the 1980s, neoliberal policymakers were aware that the privatization of power systems would require dismantling the legacy of public energy systems that had been built up over many decades. Therefore, if the private sector was prevented from (or disinterested in) taking over the existing public companies, changes in the law would, in any case, require those same public companies to operate as private companies. The "energy market reform" promoted by neoliberal lawmakers at both national and multilateral levels strived to erect a legal framework whereby majority- or fully-owned public companies were expected to compete with private

37 Andrew Prag (IEA), Dirk Rottgers and Ivo Scherrer (OECD), "State-owned Enterprises and the Low-Carbon Transition," Working Paper 129, at www.oecd.org/environment/workingpapers.htm and www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ENV/WKP(2018)3&docLanguage=En.

energy providers. This is known as marketization. However, incumbent public companies normally operated at levels where economies of scale and paid for (amortized) infrastructure meant that, on a strict market basis, competing with so-called independent power producers (IPPs) would, all things being equal, have posed no significant problem. Aware of this reality, neoliberals then chose to subsidize the IPPs (especially in renewables) so they could gain market advantage over public companies, and then legally mandatory for public utilities to buy electricity from IPPs at above market prices (the so-called "take or pay" system.) In terms of the Global South, public companies that needed World Bank financing to improve and expand access to electricity were, from the early 1990s, denied development loans which further undermined their position as national monopolies.

In dozens of countries, competent civil servants who once led public companies were replaced by highly paid CEOs from the private sector, most of whom were pro-market ideologues and advocates of so-called New Public Management which used management tools from the private sector, and outsourced to private contractors many of the functions that were once performed by public employees. Marketization therefore changed the mandate from serving the public good and nation-building to one that required creating profit-making opportunities for private investors. And in this hostile policy environment, still-public power companies had to attract capital and pay dividends to shareholders in the same way as private companies that are registered on the world's stock exchanges.

But whether publicly or privately owned, power companies are currently required to operate within a legal framework established by neoliberal policy. The presence of such a legal framework is such that public entities must operate within a market system, and *behave like capitalist enterprises*.

For a left GGND, *changing the mandate* of public companies while at the same advocating for the strategic renationalization of energy systems is paramount. The transition away from fossil fuels is therefore inconceivable without a reform agenda that can demarketize public companies and reconstitute energy planning.[38] The commodification of electricity means that both private and still-public companies therefore have no stake in the *reduction* of energy demand or the promotion of energy efficiency. However, both efficiency and demand reduction are GPGs because they are essential to securing a stable climate. But they do not fit in with the current energy-for-profit neoliberal regime. Therefore, energy companies that today generate nearly all the world's electricity must be reclaimed, and they must be issued a new public mandate.

38 For a more detailed discussion, see Sean Sweeney and John Treat, "Beyond Disruption, "TUED Working Paper 14, Part Three, at https://rosalux.nyc/beyond-disruption-how-reclaimed-utilities-can-help-cities-meet-their-climate-goals.

## 2021: Global Trade Union Task Force

In 2021, The Trade Union Task Force for a Public Energy Future identified several key goals that comprehensive reclaiming—full public ownership—can help achieve:

1. **A clear shift in the mandate of public utilities.** What are today privatized, corporatized, or marketized public or quasi-public utilities must be fully restored (financially, but also in terms of adequate skills and human resources) as vital public concerns. However, they must pursue or comply with a GPGs agenda.

2. **New democratic and accountable regulatory bodies**. Just as the neoliberal project of privatization and liberalization relied upon new regulatory bodies (so-called "independent systems operators," or ISOs) to police and enforce the neoliberal energy transition, so a transition back to public electricity ("reclaiming") will require institutions and structures of governance to ensure that reclaimed utilities operate in ways that are transparent and flexible, and that promote cooperation and public participation at all levels.

3. **Pro-public electricity market reform**. Implementing a new mandate for reclaimed companies will require that neoliberal laws be repealed. The original neoliberal idea of "competitive electricity markets" never materialized. Today, with few exceptions, long term contracts on pre-agreed and legally binding terms are the norm. These contracts (known as "power purchase agreements," or PPAs) serve to protect private investors from any potential market volatility and, ironically, from the market dominance of state-owned companies. Much to the disappointment of neoliberal policymakers, many governments (particularly in the Global South) have ignored or responded reluctantly to instructions from the IMF and the World Bank to create "competitive" electricity markets, establish emissions trading schemes, etc. Even governments that accept the need to engage the private sector through public-private partnerships (P3s) understand that there can be no competitive market for electricity that is at the same time capable of providing "certainties" for the same private investors with whom they may wish to engage.

4. **Reconstitute Planning**. Decommodification opens the door to an integrated and planned approach to the energy transition. Market share concerns will no longer determine the behavior of energy companies. Instead of providing opportunities for individuals and businesses to make money at the expense of the wider public, the efficacy of distributed

generation can be assessed based on social and ecological criteria, and a clear understanding of its impact on the entire system of energy provision.

5. **Economywide decarbonization.** Once they are reclaimed, made fully transparent, and operating under new forms of governance and mechanisms for accountability, integrated public utilities will have the freedom to extend their operations in ways that can assist in the decarbonization of transport, industry, food and agriculture, and other sectors that currently depend on fossil fuels.

## The Means of Production: Electricity and Industrial Action

It is worth imagining the potential political impact of full popular control over both the power utilities and the various energy suppliers. Controlling electricity (and thus the internet) can be a powerful weapon in fights against recalcitrant employers who, for example, do not comply with energy saving regulations that have been passed into law. The utilities' capacity to pull the plug can reinforce workplace-based efforts to organize, and thus contribute to economic democracy and social justice.

Such power needs to be used only as a last resort and sparingly, but electricity is today the means of production in the sense that a modern economy cannot function without it. If left in the hands of the rich and powerful, we face deepening "electricity apartheid," where only the wealthy are guaranteed access to reliable electricity. It is a scenario that is today impeded by the legacy of public energy and the commitment to provide a universal service. But one of the consequences of the neoliberal agenda is to subvert that commitment through so-called corporate power purchase agreements (CPPAs) that are currently proliferating in different parts of the world.

## The Importance of Decommodification

The dismantling of the current system of P3 based contracts presents opportunities to *decommodify* electricity. A left GGND must move away from the current system based on long-term power purchase agreements (PPAs) preferred by for-profit developers and investors. Utilities reclaimed to public ownership will probably need to engage with private companies (especially

technology suppliers). However, this engagement can follow tried and trusted methods of public procurement; it must be transparent, but it need not involve the sale or purchase of electricity as a commodity.

Public ownership accompanied by decommodification allows a left GGND to begin to realize the enormous potential of energy efficiency and conservation. This will address a critically important shortcoming of green recovery policies that rely on incentives and subsidies grants to promote efficiency and conservation. The IPCC, the IEA, and others have estimated that efficiency can potentially contribute up to 40% of the reductions in energy-related emissions required by 2050.[39] For buildings, the IEA has estimated that renovation of a quarter of the existing stock in the advanced economies would reduce total CO2 emissions from space heating by a third. In the Global South, where building stock is expanding rapidly, up to 60% of buildings that will be in use in 2030 are not yet built, which presents opportunities to establish building codes to ensure that new buildings are as efficient as possible.[40]

But there is more than enough evidence to suggest that, under the current policy framework, these potential emissions reductions will not be fulfilled. In fact, in recent years the pace of efficiency improvements has slowed significantly. For example, annual reductions in "carbon intensity" stood at around 1.28% per year between 1960 and 2000. But from 2000 to 2014, the level of improvement slowed to 0%. Carbon dioxide efficiency trends in the high-income OECD countries also slowed, from 1.91% annually for the period 1970–2000 to 1.61% for the period 2000–2014.[41]

The climate implications of these worryingly low improvements in energy efficiency are acknowledged by the policy mainstream. According to the IEA, "Under existing policies, the vast majority of economically viable energy efficiency investments will remain unrealized."[42]

And so we (again) confront the fundamental problem: Efficiencies are not

39 IEA/IRENA, Perspectives for the Energy Transition: Investment Needs for a Low Carbon Energy System, at www.irena.org/publications/2017/Mar/Perspectives-for-the-energy-transition-Investment-needs-for-a-low-carbon-energy-system. See also, Akashi et al., "Halving global GHG emissions by 2050 without depending on nuclear and CCS," *Climatic Change* 123 (2014): 611–622, at https://link.springer.com/article/10.1007%2Fs10584-013-0942-x; The "Low Energy Demand scenario" (LED scenario) developed for the IPCC by Arnulf Grubler suggests that if already existing energy-saving technologies and methods were fully deployed or operationalized, the reductions could be as high as 53%. See Arnulf Grubler, et. al., "A low energy demand scenario for meeting the 1.5 °C target and sustainable development goals without negative emission technologies," *Nature Energy*, vol. 518, issue 3, (June 2018): 515–527, at www.nature.com/natureenergy.

40 IEA, "Recommendations of the Global Commission for Urgent Action on Energy Efficiency," p.12, June 2020, at www.iea.org/reports/recommendations-of-the-global-commission-for-urgent-action-on-energy-efficiency.

41 T. Parrique, et al., "Decoupling debunked: Why green growth is not enough," European Environmental Bureau, 2019, at eeb.org/decoupling-debunked.

42 IEA, "Capturing the Multiple Benefits of Energy Efficiency, International Energy Agency," Paris, 2014.

being pursued because there are few opportunities for private interests to make money. In the industrial sector, private companies—concerned about profit margins and market shares—normally only invest in efficiency when it is either cost effective to do so (in a narrow monetary sense) or when it is to comply with government regulations.[43] This no profit-no investment state of affairs amounts to a clear indictment of the current policy.[44]

Of course, neoliberal policymakers assumed that pricing CO2 would accelerate efficiency improvements. But the fact that there is no effective CO2 price therefore means there is no incentive to invest in efficiency; the result is the perpetuation of highly inefficient energy use and ever higher emissions. However, green recovery investment without ownership approaches is not capable of driving a non-market approach to efficiency. But working on the basis of a new pro-public mandate, public companies can play an important role in promoting efficiency and controlling and reducing demand.

## Part Two: Re-Owning Ownership

A common feature of discussions on a left GGND is the lack of attention to public ownership. In fact, left GGND advocates are all over the map on this crucially important question; either that or they avoid the issue altogether. This lack of clarity or avoidance seriously undermines claims that a left GGND offers a radical alternative to the current neoliberal approach. For example, many leading GGND advocates criticize the core agenda of neoliberalism (trade and financial liberalization, privatization and the undermining of public services, etc.) but seem to be comfortable supporting "green investment," even though green policies currently align with the broader neoliberal agenda that have been designed to liberalize, privatize, and shift resources and economic power into the hands of the private sector while undermining public companies and services.

GGND advocates are comfortable talking about public *investment*, but they are not inclined to discuss investment in ways that might facilitate both the expansion of state assets and the capacity of governments to act. Most agree that a GGND will require a series of radical transformations of key economic sectors (particularly energy). But to what extent might this require the extension of public ownership? This question is given little or no

43 CEPS Policy Insight, "Transforming Energy-Intensive Industries: Reflections on innovation, investment and finance challenges," 2017.
44 IEA, "Recommendations of the Global Commission for Urgent Action on Energy Efficiency." June 2020. www.iea.org/reports/recommendations-of-the-global-commission-for-urgent-action-on-energy-efficiency

attention. It is as if the transformative goals of a GGND—including a much-needed "energy revolution"—can be achieved without upsetting the current balance between the private and public sectors, which is today skewed towards the former.

## Entrenched Fallacies

The cursory attention to public ownership speaks to the resilience and durability of the neoliberal framework. This framework is sustained by three entrenched fallacies, each of which have been dealt with in previous TUED papers and will, therefore, only be mentioned here in passing.

1. **The transition to a low carbon future is inevitable** and is already well underway. This idea is false.[45] A transition away from fossil fuels is not happening. In fact, fossil fuel use is growing, not shrinking. This is expected to continue for a decade or longer. What is happening today is more accurately termed energy *expansion*, not an energy *transition.* Given the timetable for emissions reductions established in 2018 by the IPCC's *Special Report on 1.5 Degrees* to stay within 1.5 degrees Celsius of warming, human-caused CO2 will need to fall by about 45 percent from 2010 levels by 2030. Under the current policy framework, this is not going to happen.[46]

2. **The private sector is leading the transition**; therefore, policy must guarantee that the private sector gets what it wants so that it can continue to supply the transition with the necessary capital. This idea is also false. The private sector is not leading the transition; rather it is responding to subsidies and incentives that have been introduced by governments, and that the private sector insists need to be in place to attract private investment. In areas of the world where decarbonization has made some headway (mainly in the power sectors of the OECD countries), it has been driven by public subsidies and "out of market protections" for renewable energy and other "green" technologies. Despite the subsidies, there is still a massive investment deficit.[47] In other words, the current approach to mobilizing capital investment to address climate change is failing and has been failing for some time. The reason for this is simple: when investment is contingent upon securing "satisfactory returns," private interests retain a "yes we will, no we

45 TUED/Transnational Institute, *Energy Transition or Energy Expansion?* 2021, at www.tni.org/files/publication-downloads/tued-tni-energy-expansion.pdf.
46 Euractiv, 'Bad news' and 'despair': Global carbon emissions to hit new record in 2018, IEA says, at www.euractiv.com/section/climate-environment/news/bad-news-and-despair-global-carbon-emissions-to-hit-new-record-in-2018-iea-says/.
47 IEA, World Energy Investment 2019: Webinar, 14 May 2019, at https://youtu.be/ZulVjHW7n5k.

won't" power over the energy transition. And the use of that power has starved the transition of much needed investment.

3. **There is no alternative to a profit-driven P3 model**, no viable *public pathway* to a just energy transition and a low carbon future. This idea is so entrenched that alternative perspectives remain off the radar for both mainstream policymakers and many mainstream environmental organizations. This means that the idea of a publicly driven and non-profit-based delivery of core climate protection measures is rejected without careful consideration of the social and environmental advantages that such an approach might produce.

In Part Four we will show that the resilience of neoliberal climate policy is not just a product of hardened ideology or circular thinking. The occupation of the multilateral system, including many key UN agencies, by large corporations is also a major factor because it allows climate policy to hide behind green recovery politics and policies. Nonetheless, the normalization of these core neoliberal ideas has, for three decades, played an important role in sustaining the framework.

## From Roosevelt to Biden

Meanwhile, the avoidance of ownership was evident in the aspirational resolutions submitted by US House Representative Ocasio-Cortez on the GND. As noted above, the resolution called for a ten-year mobilization led by the Federal Government "on a scale not seen since World War II and the New Deal."[48] The resolution noted that the US government has space "to take an equity role in projects, as several government and government-affiliated institutions already do." But there was no recognition of the need, for example, to radically reform the country's energy system to meet the GND's climate targets. In the case of the US, the privatization wave of the 1980s and 1990s meant that for-profit Investor-Owned Utilities (IOUs) captured more than 70% of the US electricity market.[49] The GND resolution stated that Congress should ensure that "the public receives appropriate ownership stakes and returns on investment," without stipulating what either might be.[50]

As noted above, UNCTAD proposed a GGND in 2019—before the onset of the pandemic. The delivery of global public goods, UNCTAD suggested, must be accompanied by changes in global governance—a "new

48 US House of Representatives Resolution, H.Res.109 — 116th Congress (2019-2020), www.congress.gov/bill/116th-congress/house-resolution/109/text.
49 US Energy Information Administration, at www.eia.gov/todayinenergy/detail.php?id=40913.
50 US Congress, resolution/109/text#HE12CB64AF6F84B168B00A4BDB2202FDC, at www.congress.gov/bill/116th-congress/house.

multilateralism" —and through the revitalization of public finance.[51] Among other things, it noted that WTO rules are an obstacle to "South-South cooperation on low-emission research and design, and green investment strategies that include technology transfer."[52]

In terms of its level of detail and depth of analysis, UNCTAD's contribution to the GGND discussion stands out and is hugely important in terms of clarifying what needs to be done at the level of the multilateral system to secure a clear shift in the direction of global economic management. It proposes a system of global finance where capital is used to address major social and environmental crises and committed to the delivery of GPGs—perhaps along the lines of a Global Marshall Plan where grant-based finance can be scaled up. Policies that incur more debt for the Global South are not consistent with the need to deliver a stable climate (and a stable world) as a GPG.[53]

But the emphasis is again on investment, not ownership. It proposed that investment should be directed towards the "real economy" or "productive sectors" because it is these sectors that create jobs and improve infrastructure and services. And investment in green economic sectors such as renewable energy should, suggests UNCTAD, be a key feature of the GGND.[54]

Progressive opinion leaders are also seemingly unconcerned about ownership. According to leading left thinker and former Minister of Finance of Greece Yanis Varoufakis, "We need an International Green New Deal: a pragmatic plan to raise $8 trillion, 5% of global GDP—each year, coordinate its investment in the transition to renewable energy" in a manner that "mobilizes public finance to crowd in private investments that, together, fund the $8 trillion transition. Just like in the original New Deal, public financing will involve a mix of taxes and bond instruments."[55] For Robert Pollin, co-director of the influential Political Economy Research Institute (PERI) at the University of Massachusetts at Amherst, and co-author with Noam Chomsky of *Climate Crisis and the Global Green New Deal: The Political Economy of Saving the Planet,* a GGND should be built around raising clean energy investment from 0.4 % of global GDP (in 2015) to 1.5%–2% of global

51 UNCTAD and Boston University, A New Multilateralism for Shared Prosperity: Geneva Principles for a Global Green New Deal, at https://unctad.org/webflyer/new-multilateralism-shared-prosperity-geneva-principles-global-green-new-deal. See also UNCTAD, Reforming the International Trading System for Recovery, Resilience and Inclusive Development, UNCTAD Research Paper No. 65, UNCTAD/SER. RP/2021/8.

52 Ibid.

53 See Kevin P. Gallagher and Richard Kozul-Wright, *The Case for a New Bretton Woods*, VitalSource Bookshelf, Polity, 2021. Introduction.

54 Robert Pollin, "Green Growth vs a Green New Deal," *New Left Review*, Issue 112 (July-Aug 2018), at https://newleftreview.org/issues/ii112/articles/robert-pollin-de-growth-vs-a-green-new-deal.pdf.

55 This article was co-written by David Adler. See: Yanis Varoufakis and David Adler, "It's time for nations to unite around an International Green New Deal," *The Guardian*, April 23, 2019, at www.theguardian.com/commentisfree/2019/apr/23/international-green-new-deal-climate-change-global-response.

GDP annually over the next two decades—a 300% to 400% increase. "CO2 emissions," suggests Pollin, "can be eliminated altogether in forty to fifty years through continuing this clean-energy investment project at roughly the same rate of about 1.5–2 per cent of global GDP per year."[56] In Pollin's case, it does not seem to matter who is doing the investing or for what reason—just as long as there is plenty of it.[57]

The significance of this neglect of ownership cannot be understated. Key supporters of a GND in the US (including House Representative Ocasio-Cortez and the main environmental groups) would later warmly embrace the Biden Administration's climate bill (the Inflation Reduction Act, or IRA) that was signed into law in August 2022.[58] The legislation is expected to gift for-profit renewable energy and other green companies an estimated $369 billion in "direct pay" tax credits without significantly increasing public control over energy.[59] We return to this issue in Part Four.

At the global level, progressives' emphasis on investment increased in 2022 as governments began to pare back pandemic recovery spending due to inflation concerns.[60] Warning that a contraction in government spending and a move towards austerity measures would harm the world's poor and impede efforts to address climate change, progressive voices called for governments to sustain or increase public investment in productive sectors, including the "green economy."[61] According to UNCTAD, "Today's spiraling climate and energy crises call for massive state-led investment (both to increase energy efficiency and to develop supply of renewable energy)" to accelerate "transitioning the economy out of its dependence on fossil fuels."[62]

The need for massive state-led investment is indisputable, as is the need for fiscal measures that can sustain and strengthen public budgets at the national level, including debt-burdened countries of the South.[63] A GGND

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56 Pollin in NLR: https://newleftreview.org/issues/ii112/articles/robert-pollin-de-growth-vs-a-green-new-deal.pdf. See also: Noam Chomsky and Robert Pollin, with C.J. Polychroniou, *Climate Crisis and the Global Green New Deal: The Political Economy of Saving the Planet* (New York: Verso, 2020).

57 Robert Pollin, "Green Growth vs a Green New Deal," *New Left Review*, Issue 112 (July-Aug 2018), at https://newleftreview.org/issues/ii112/articles/robert-pollin-de-growth-vs-a-green-new-deal.pdf.

58 For 350.org's endorsement, see https://350.org/press-release/congress-ira. "In particular, we are heartened by the massive investment in renewable energy that will speed up the U.S. economy's fossil free transition and significantly reduce emissions."

59 For a solid critique of Biden climate bill from the left, see Matt Huber, 'How the Green New Deal Became the Inflation Reduction Act and Lost Its Soul', https://socialistcall.com/2022/08/17/green-new-deal-inflation-reduction-act/.

60 For a left analysis of US inflation and its manageability, see Mark Weisbrot, 'Inflation Is Falling Much Faster than Most People Know', https://cepr.net/wild-inflation-not-anymore-a-closer-look-shows-were-already-approaching-normal/.

61 UNCTAD, *Trade and Development Report*, 2022, at https://unctad.org/system/files/official-document/tdr2022_en.pdf.

62 Ibid. According to UNCTAD, "The distance between the ambitions of developed countries and their willingness to lend commensurate support to developing countries remains large."

63 This has had a hugely negative impact on many African nations where, the UNCTAD chief noted,

and the delivery of GPGs will need to be financed, and it is understandable that, with the rising threat of austerity and economic contraction, adequate "relief and recovery" spending be a central concern for the progressive policy community.

## Investment is Not a Climate Policy

But none of this alters the fact that public investment, while a better alternative to austerity in terms of its social and economic outcomes, is simply not an effective climate policy. It does not address the shortcomings of the neoliberal policy framework, and in many respects green recovery provides cover for those shortcomings by reinforcing its core assumptions, such as the "leading role of the private sector." Green recovery allows for neoliberal policymakers to continue to pursue and endorse P3s; it focuses unduly on "de-risking" and "unlocking" private investment (the failures of which are dealt with below) and it displays an unwavering commitment to the lost cause of carbon pricing. Meanwhile, this same policy framework transfers large amounts public money into private hands by way of subsidies and guarantees for green sectors.

A left GGND must both expose, explain, and respond to the colossal failures of neoliberal policy. Calling for "public investment" alone is not compatible with what a left GGND aspires to achieve.

There are three main problems with this singular and undiscerning approach to investment, problems that are highlighted throughout this and other TUED working papers. These are:

1. **The failure of climate investment to date**: The current neoliberal approach to energy transition and climate investment has been unable to do what it set out to do more than 30 years ago when the policy framework was put in place. The plan then was—and currently is—to "unlock" or "mobilize" from private sector investment the levels of capital needed to meet climate goals. This has not worked. Today this so-called investment deficit is massive, and it is getting larger. As the IEA noted in 2019, "There are few signs of the major shift of capital towards efficiency, renewables and innovative technologies that is needed to turn emissions around…. Investment and financing decisions are shaped by policies: today's frameworks are not yet equipped to avoid multiple risks for the future." [64] In other words, the current approach to mobilizing capital

currency depreciations have increased the cost of debt repayments "by the equivalent of public health spending in the continent." See 'Developing countries face 'impossible trade-off' on debt: UNCTAD chief', at https://news.un.org/en/story/2022/12/1131432.

64 IEA, World Energy Investment 2019: Webinar, 14 May 2019, at https://youtu.be/ZulVjHW7n5k.

investment to address climate change is failing and has been failing for some time.[65] The reason is simple: there is simply not enough profit in reducing emissions or in adaptation to climate change to attract the levels of investment required. The answer, therefore, is not more investment; the only plausible solution to the investment deficit is to liberate climate policy from the need to secure "satisfactory returns" for private interests. This approach must be anchored in the extension of public ownership informed by a GPGs approach.

2. **Weakening of state budgets and capacities**: When packaged by neoliberal policymakers as P3s, an increase in public investment merely strengthens the private sector, drains government budgets, and further weakens the capacity of states to shape their economies in ways that can meet social and ecological needs. P3s are often socially regressive in terms of their impact and, from a climate standpoint, they have been ineffective. The more public money is committed to de-risking private investment, the more serious this problem becomes.

3. **Preventing economywide planning**: Public investment without public ownership creates barriers to the kind of direct interventions needed to drive a planned and economywide decarbonization and the achievement of a stable climate and clean energy systems as GPGs. If the evidence of the past three decades are any guide, without a radical shift in the investment regime towards a public approach, bold approaches to energy conservation, efficiency, the creation of public works programs for climate change adaptation, etc., will never materialize.

If the GGND is to qualify as an alternative to the current neoliberal approach to climate and energy transition, it must develop a public ownership pillar that makes it distinct from an investment agenda of the kind referred to above. The GGND must go *beyond recovery*.

# Part Three: The Fiasco of Privately Produced Public Goods

> Markets do not automatically provide the right type and quantity of public goods, because in the absence of public policy there are limited or no returns to private investors for doing so: in this case, markets for relevant goods and services (energy, land use, innovation, etc.) do not reflect the consequences of different consumption and investment choices for the climate. Thus,

65 IRENA, 'Transforming the energy system', September 2019, ISBN: 978-92-9260-149-2, at www.irena.org/publications/2019/Sep/Transforming-the-energy-system.

climate change is an example of market failure involving externalities and public goods.
All in all, it must be regarded as market failure on the greatest scale the world has seen.

—Nicholas Stern, *The Stern Review: The Economics of Climate Change*, November 2006

In this section, we look at how climate protection and energy transition came to be considered as GPGs; how the idea of the private provision of public goods took hold in the early 1990s. During this period, the neoliberal investor-focused approach to climate change came to dominate the UN negotiations around the Kyoto Protocols and the adoption of the UNFCCC. Anchored in several entrenched ideas, this approach continues to influence climate policy in ways that are both enduring and damaging.

## Goods Go Global

Interest in GPGs developed in parallel with the rapid acceleration of global economic integration after 1990. This was accompanied by perceived need for a more central role for global governance and the multilateral system (the UN, the IMF, World Bank, etc.) in managing economic integration.

This coincided with the rise of neoliberal ideas and the consolidation of neoliberal control over key multilateral bodies. The Great Depression of the 1930s and the impact of World War II led, in the mid-1940s, to the creation of the Bretton Woods institutions (BWIs). Reflecting FDR-period New Deal thinking, the BWIs were designed to provide currency stability (via the IMF), development assistance (via the World Bank), and to prevent trade wars that fueled military tensions and conflict in the 1930s (via the General Agreement on Tariffs and Trade that, in the 1990s, morphed into the World Trade Organization, or WTO).

In the immediate post-World War II context, currency stability, rules-based trade, and economic development for countries of the Global South became recognized as GPGs. According to Boston University's Kevin Gallagher and UNCTAD's Richard Kozul-Wright, the international order was constructed to support five key GPGs, namely, "a stable monetary and exchange rate system; a global lender of last resort to provide liquidity to distressed nations; counter-cyclical and long-term lending; open markets including under recession; and a coordinated international economic policy."[66]

The oil shock recessions and hyperinflation of the 1970s set the stage for a

66 Kevin P. Gallagher and Richard Kozul-Wright, *The Case for a New Bretton Woods*, VitalSource Bookshelf, Polity, 2021. Introduction.

neoliberal takeover of the BWIs. Prominent neoliberals presided over a shift towards trade-led economic growth via the proliferation of trade agreements that favored the giant global banks and multinational corporations. The shift unleashed a wave of IMF-led structural adjustment programs (SAPs) on the Global South and most former Soviet Bloc countries that, among other things, aggressively pushed privatization, attacked (where they existed) social protections, and introduced sweeping measures to limit the power of independent trade unions.[67] Therefore, what was a GPG for the corporate elite (monetary and financial stability and low inflation) produced austerity, unemployment, a deterioration of public services, and the loss of economic sovereignty for many countries in the Global South.

## Neoliberal Climate Policy – Markets Will Deliver Global Public Goods

Perhaps inevitably, the evolving discourse around climate-related GPGs was shaped by neoliberal assumptions.

Writing for the United Nations Development Programme (UNDP) in 1999, Geoffrey Heal expressed confidence in the private delivery of GPGs. "Creating new markets," he insisted, "can be an effective and efficient means of meeting this [climate] challenge." [68] He added:

> The public good nature of atmospheric carbon dioxide is a physical fact, derived from the tendency of carbon dioxide to mix thoroughly and stably…Traditionally it has been assumed that public goods—such as law and order, defense, protection from extreme weather, essential social and economic infrastructure—should be provided by the public sector for the public as a whole. But today [1999] we know that private initiative and private actions also play an important role.[69]

Further, he stated:

> We have moved to a regime in which policy concerns focus on public goods that are privately produced. A growing tendency with such goods is to use the market to answer the "who will produce" question. This is associated with the growth of markets for emission permits and pollution rights.[70]

The idea of privately produced public goods had already had a major impact on the UNFCCC and the Kyoto Agreement that took shape in the early

67 Asbjørn Wahl, *The Rise and Fall of the Welfare State*, Pluto Press, at 2011 www.plutobooks.com/9780745331393/the-rise-and-fall-of-the-welfare-state/.
68 Geoffrey Heal, *New Strategies for the Provision of Global Public Goods, UN Development Programme (UNDP)* In *Global public goods: International cooperation in the 21st century*. 2019. Edited by Inge Kaul, Isabelle Grunberg, Marc A. Stern. Page 226.
69 Ibid, p. 221.
70 Ibid, p. 237.

1990s. The Kyoto Agreement recognized that climate change mitigation was both a collective task and a GPG, but it also institutionalized the idea that the market, if presented with a clear policy framework, could provide this public good.[71] Similarly, deliberations around the UN's Millennium Development Goals (MDGs) saw heads of state resolve, in year 2000, "to give greater opportunities to the private sector" as part of the effort to eradicate poverty and fight inequality.[72]

## Building a Market for Pollution: Whatever Happened to That Idea?

The primary market mechanism proposed to deliver climate stability was carbon pricing. In keeping with a market-based approach, neoliberals focused on the need to "price the externalities" produced by the burning of fossil fuels, i.e., to curb GHGs by placing a fee on emissions or by offering incentives to emit less. By requiring polluters to pay for their GHG emissions, companies were expected to pivot towards technologies, production methods, and business practices in ways that reduced their emissions. The higher the cost of carbon imposed by governments, the greater the incentive to move away from carbon-intensive activities.

According to this logic, a market for "atmospheric space," was needed to intercept "business as usual." If such a market was not created, the atmosphere would continue to be "used up." Since the dawn of the industrial revolution, the atmosphere had been treated as a no-cost dumping ground for polluters. Historically there had been no incentive to reduce pollution levels.[73] From this principle emerged the idea of creating a market in pollution, one facilitated by tradable emissions permits, certificates, and quotas. As Heal noted in 1999, "To introduce a regime of tradable emission quotas, we have to create property rights where none previously existed. These property rights must then be allocated to countries in the form of quotas. Such quotas have market value—perhaps very great market value."[74]

The architects of carbon pricing had imagined that a global system of

71 The idea that the private sector can provide climate-related global public goods persists. See UNFCCC, Talanoa Call for Action, 2018, at https://unfccc.int/sites/default/files/resource/Talanoa%20Call%20for%20Action.pdf.

72 United Nations, Resolution adopted by the General Assembly, at www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_55_2.pdf.

73 Peter Barnes and Rafe Pomerance, *Pie in the Sky: The Battle for Atmospheric Scarcity Rent*, Corporation for Enterprise Development, 2002, at https://community-wealth.org/sites/clone.community-wealth.org/files/downloads/paper-barnes-pomerance.pdf.

74 Geoffrey Heal, New Strategies, New Strategies for the Provision of Global Public Goods, UN Development Programme (UNDP) In Global public goods: International cooperation in the 21st century. 2019. Edited by Inge Kaul, Isabelle Grunberg, Marc A. Stern..

trading would resemble the sulfur dioxide reduction program of the 1980s to address the impact of what became known as acid rain.[75] However—as was noted more than two decades ago—the technologies used to reduce sulfur dioxide would enhance the competitiveness and likely the profitability of the polluter. The same, however, cannot be said of CO2. The costs of CO2 reduction normally add to the costs of doing business, and these additional costs reduce competitiveness and narrow profit margins. From a capitalist perspective, the cost of emissions permits must be considerably higher than the costs of abating a comparable amount of CO2, otherwise there would be no incentive to invest in emissions reducing technologies and practices.[76]

The confidence in carbon pricing and carbon markets was reflected in the Kyoto Agreement negotiated in the 1990s.[77] By the time the European Union's Emissions Trading Scheme (EU ETS) was launched in 2005, neoliberal policymakers were convinced that a global carbon market would emerge as other countries and regions followed Europe's lead. In 2006, the landmark study known as *The Stern Review: The Economics of Climate Change* predicted that carbon pricing would become universal within one or two decades.[78]

## Thirty Years Later: The Missing Carbon Price

More than thirty years have passed since carbon pricing was advanced and inaugurated as the neoliberal climate "policy of choice." It is worth considering where things stand today. As of late 2022, almost three decades after the adoption of the Kyoto Protocol, roughly 23% of global emissions have, in one form or another, been priced.[79]

In 2018, the Global Commission on Economy and Climate acknowledged that a large proportion of global GHGs were unpriced, and where carbon prices had been introduced, the prices were "still too low to have meaningful impact" on emissions levels. The Commission concluded that a global carbon price of $40–$80 per ton was needed by 2020, rising to $50–$100 by 2030.[80] The year 2020 has come and gone, and roughly half of the emissions

75 See explanation of what is meant by acid rain at US Environmental Protection Agency, www.epa.gov/acidrain/what-acid-rain.
76 TUED Working Paper, Trading in Trouble: Carbon Markets After Paris, March 2016, at https://rosalux.nyc/carbon-markets-after-paris.
77 Kyoto Protocol Reference Manual, at https://unfccc.int/resource/docs/publications/08_unfccc_kp_ref_manual.pdf.
78 *The Stern Review*, 2006, page xix.
79 World Bank, Carbon Pricing Dashboard, "Implemented" schemes as of November 1, 2020, at https://carbonpricingdashboard.worldbank.org/map_data.
80 The New Climate Economy, "Unlocking the Inclusive Growth Story of the 21st Century: Accelerating Climate Action in Urgent Times," at https://newclimateeconomy.report/2018/.

subjected to a price during that year were priced at *less than $10 per ton*—far too low to have anything more than a negligible impact on emissions levels.[81] According to the World Bank, "less than 4% of global emissions are currently [2022] covered by a direct carbon price within the range needed by 2030."[82]

Always quixotic, the effort to establish an effective and universally applied price on carbon has been a monumental failure, and the chances of such a price emerging in the foreseeable future are effectively zero. Given this sobering reality, it is difficult not to be perplexed by the World Bank's ability to sugarcoat the data. In 2016, it noted, "While carbon pricing has expanded significantly in recent years, in many instances these initiatives are still at an early stage in achieving impact."[83] In its 2021 report, the World Bank noted, "More governments are adopting net zero targets and we are beginning to see more ambitious carbon pricing instruments."[84] Neoliberal policymakers continue to insist that, absent an effective global price on carbon, emissions reductions consistent with the Paris targets are impossible.[85]

Unfortunately, there is little indication that this circular thinking and handwaving are on the wane. [86]

The private provision of a global public good—namely, the prevention of the unrestrained filling up of the earth's atmosphere with GHGs, by creating property rights and pricing emissions, in order to mitigate the impacts of climate change—has been a monumental policy failure.[87] Carbon pricing was supposed to provide an economywide mechanism that can reduce emissions in a cost-effective way. But its status as *a core policy*—more significant than any other—has precluded other forms of action to reduce emissions.

Given the implications of this failure in terms of climate stability and the likely impact of climate change on future generations, it is worth reflecting

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81 World Bank, *State and Trends of Carbon Pricing 2020*, May 2020, at https://openknowledge.worldbank.org/handle/10986/33809.

82 World Bank, *State and Trends of Carbon Pricing 2022*, May 2022, at https://openknowledge.worldbank.org/handle/10986/37455.

83 World Bank, *State and Trends of Carbon Pricing 2016*, October 2016, at https://openknowledge.worldbank.org/handle/10986/25160.

84 "World Bank, *State and Trends of Carbon Pricing 2021*, 2021, at https://openknowledge.worldbank.org/handle/10986/35620.

85 The New Climate Economy, *Unlocking the Inclusive Growth Story of the 21st Century: Accelerating Climate Action in Urgent Times*, at https://newclimateeconomy.report/2018/.

86 Unfortunately, many progressives still support carbon pricing. According to Robert Pollin,"Pricing carbon emissions through either a carbon tax or a cap on permissible emissions certainly needs to be a major component of the [GND's] overall industrial-policy mix." Robert Pollin, "Green Growth vs a Green New Deal," *New Left Review*, Issue 112 (July-Aug 2018), at https://newleftreview.org/issues/ii112/articles/robert-pollin-de-growth-vs-a-green-new-deal.pdf.

87 For more discussion on carbon pricing and why it failed, see TUED Working Paper #6, 2016, Carbon Markets After Paris: Trading in Trouble, at: www.tuedglobal.org/working-papers/carbon-markets-after-paris-trading-in-trouble.

on one of the key points of the *Stern Review* of 2006: "Carbon pricing gives an incentive to invest in new technologies to reduce carbon; indeed, without it, there is little reason to make such investments."[88] In other words, climate protection under capitalism needs to be incentivized.

## Still Private: Intellectual Property and Essential Technologies

At the UNFCCC's Earth Summit in 1992, the international community agreed to "support existing mechanisms and, where appropriate, establish new mechanisms for the development, transfer and diffusion of environmentally sound technologies to developing countries and economies in transition."[89] But the neoliberal approach to intellectual property has consistently served the interests of corporations. Corporations claim that legal protections for intellectual property would attract investment, and therefore contribute to the overall stock of human knowledge and knowhow. But the evidence suggests something quite different. Restrictions in intellectual property have during the past two decades become progressively more stringent, and energy-related research and development (R&D) expenditures have fallen.

In a 2020 report, the IEA described the decade-long stagnation in R&D spending as a "public goods market failure." Today, the investment deficit in climate-relevant technologies is increasing, not decreasing. Using uncharacteristically direct language, the IEA got to the heart of the problem: "The private sector has limited incentive to produce knowledge if firms cannot fully exploit the returns on their investment because that knowledge is easily available to others." According to the IEA, this failure "leads companies to prioritize expenditures from which profits are more certain" because green technologies "have low market value." [90]

Global governance reform and the revitalization of public finance are both key to resolving the problem of insufficient investment in climate-related R&D. WTO rules such as the TRIPS Agreement and TRIPS+ measures have, says UNCTAD, made it difficult to "recognize key technologies as public goods" and these rules should be replaced with rules that allow the world to move towards "open-sourcing key green technologies as GPGs, South-South

88 *The Stern Review*, 2006, p. xix.
89 UNFCCC, 1992, Intellectual Property and Access to Clean Energy Technologies in Developing Countries: An Analysis of Solar Photovoltaic, Biofuels and Wind Technologies. Cited in: John H. Intellectual Property and Access to Clean Energy Technologies in Developing Countries: An Analysis of Solar Photovoltaic, Biofuels and Wind Technologies. International Centre for Trade and Sustainable Development (ICTSD) Trade and Sustainable Energy Series, Issue Paper No. 2., 2007, www.iprsonline.org/New%20 2009/CC%20Barton.pdf
90 IEA, "Clean Energy Innovation," IEA, Paris, 2020, at www.iea.org/reports/clean-energy-innovation.

cooperation on low-emission research and design, and green investment strategies that include technology transfer."[91]

When he was a chief economist at the World Bank, Joseph Stiglitz wrote, "The international community, through institutions like the World Bank, has a collective responsibility for the creation and dissemination of one global public good—knowledge for development." He suggested then [1999] that a successful development program around knowledge could be a P3, one where "knowledge, [development] aid and private capital work together; they are complementary."[92] Almost twenty-five years later, it turns out that they are anything but complementary. Discussions on the GGND can—indeed must—acknowledge that knowledge should serve the public good, not private profit. There is no room in this equation for so-called trade secrets and the hoarding of techniques and experience in order to assert a competitive advantage.

## Electricity Privatization and Endless Subsidies

The same thinkers who assumed the market would address rising emissions also suggested that the privatization of electricity, beginning with "unbundling" (the breaking up of vertically integrated public companies) provided another means by which private interests could deliver on public goods that had normally been provided by public entities. In the late 1990s, according to Heal:

> With unbundling, any power provider can use the grid to distribute its power. The underlying physical network has always had the characteristics of a public good, requiring large-scale provision to be effective. [T]wo trends—technological changes permitting efficient small-scale power generation and the dissociation of distribution from production—permit substantial competition in the provision of power, changing the business radically. One effect: more competition in the provision of services.[93]

As with carbon pricing, power sector privatization as a means of decarbonizing electricity is an idea whose time has passed, but it refuses to go away. The idea that "technological changes permitting efficient small-scale power generation and the dissociation of distribution from production" would produce efficiencies may have seemed logical (to some) decades ago, but there is today a mountain of empirical evidence that points to a clear conclusion: the private provision of once-public electricity has not only

91 UNCTAD and Boston University, "A New Multilateralism for Shared Prosperity: Geneva Principles for a Global Green New Deal."
92 UNDP, "Global public goods: international cooperation in the 21st century," 1999, p. 320.
93 Geoffrey Heal, New Strategies for the Provision of Global Public Goods.

contributed to energy poverty ("excludability"), it has made energy provision a battleground between competing interests (therefore "rivalrous.")

One of the defining features of the neoliberal approach to the energy transition has been the massive transfer of public money to private companies and investors. Instead of delivering a GPG, the effort to enable private provision has impeded what could have been a far more straightforward, equitable, and effective public pathway approach to power sector decarbonization.[94]

Privatization has turned a public good (electricity delivered as a public service) to a private good (electricity as a commodity, traded for profit). The realities of privatization are therefore far removed from the textbook definition of a public good. Today, there is currently no genuine competition between small producers of renewable energy and large ones. Without subsidies, small-scale power systems, already marginal, would be mostly nonexistent.[95] The same is true for large-scale renewable energy projects, the vast majority of which rely on "out of market protections" of one form or another.[96]

It is worth remembering that *The Stern Review* in 2006 urged governments to provide incentives to the private sector so that low carbon technologies would be developed and deployed. The *Review* posited: "The climate is a public good" and that, "Markets do not automatically provide the right type and quantity of public goods, because in the absence of public policy there are limited or no returns to private investors for doing so."[97]

However, Stern failed to anticipate that the incentives to for-profit renewable energy companies would become a permanent arrangement. Stern recognized incentives and subsidies for renewables would initially *increase* costs, but he argued that this would ensure growth and profits *over the longer term* while protecting the economy from the massive external threat of climate instability. He said the same about the carbon price. Once emissions were priced, and the cap on emissions increased over time to raise the carbon price incrementally, Stern predicted there would be an inexorable transition towards a more sustainable, low carbon world—one driven by investments in renewable energy, energy conservation, and green technologies.

Globally, the growth in wind and solar installations has been almost entirely dependent on subsidies. The for-profit renewables industry has gone to great lengths to convince policymakers and the broader public that the subsidies

94 See, for example, TUED, *Preparing a Public Pathway: Confronting the Investment Crisis in Renewable Energy,* November 2017, at www.tuedglobal.org/working-papers/preparing-a-public-pathway.
95 TUED, The Rise and Fall of Community Energy in Europe, 2020, at www.tuedglobal.org/working-papers/wp13.
96 TUED, *Preparing a Public Pathway*.
97 *The Stern Review*, 2006, op cit. p. 25.

will soon no longer be necessary, and wind and solar is about to reach a tipping point in terms of being able to compete with fossil fuels. As we have discussed in considerable detail elsewhere, this claim is very misleading.[98]

Today, all energy sources and key technologies are subsidized in a way that makes profitable what would not otherwise be profitable, and there is a growing number of voices in the policy mainstream who understand that the current policy framework is simply not compatible with meeting climate targets. The subsidies regime amounts to a massive transfer of public money to private interests that deprive public budgets in order to secure returns on investment.

The fact that private interests today want (and expect) incentives, remuneration mechanisms and long-term contracts for storage, energy efficiency, EV charging stations, etc., also supports the argument that the private provision of public goods is not only fundamentally flawed, but—paradoxically—it is today entirely dependent on public money, and there are clear signs that this dependency could continue long into the future.

Neoliberal policy has shown itself to be unable to provide GPGs such as a stable climate and a just energy transition. What were touted as efficient and cost-effective measures (carbon pricing, electricity privatization, etc.) have turned out to be inefficient, socially regressive, and more expensive than if public entities were tasked with providing those same goods—an approach we discuss in more detail in Part Four of this paper. Similarly, rules to restrict "knowledge for development" have become more stringent, not less. For-profit renewable energy and other green companies are not sharing knowledge in a way that is consistent with a GPGs approach. On the contrary, they are using that knowledge—knowledge that was largely developed by public funds—for their own commercial advantage.

## Part Four: The Resilient Failure

Part Three of this paper drew attention to the failure of privately produced GPGs as it pertains to climate protection and energy transition. The 25-year push to price carbon to reduce emissions has been a policy disaster. Equally telling, neoliberal policy has not created self-sustaining markets in "low carbon solutions" and these solutions remain subsidies dependent.[99]

98 Sean Sweeney and John Treat, "Energy Transition or Energy Expansion?" Transnational Institute, 2021. See also A. Stukalkina and C. Donovan, "The dangers of subsidy-free renewable energy," Imperial College Business School, 30 October 2018, at www.imperial.ac.uk/business-school/ib-knowledge/finance/the-dangers-subsidy-free-renewable-energy.

99 IEA, World Energy Investment 2019: Webinar, 14 May 2019, at https://youtu.be/ZulVjHW7n5k.

Meanwhile, investment levels remain far below the levels needed to reach climate targets.[100] And when annual reductions in emissions should be falling dramatically, the opposite is happening.[101] But despite the record of failure, the neoliberal approach remains resilient. This resilience requires an explanation. And part of the explanation lies in the capacity of climate policy to present itself as progressive, sustainable, and helping the world transition away from fossil fuels.

Part Four surveys the shifts in elite thinking over the past twelve to fifteen years, focusing on climate and energy policy, and how this policy has been shaped by key multilateral institutions, among them the IMF, the World Bank, the World Economic Forum (WEF), UNEP, the UNFCCC, and others. It shows how changes in multilateral policy over the past decade—particularly green recoveries and the shift towards multistakeholder governance—have helped to sustain the current climate and energy policy framework and conceal its failings. This has been accompanied by efforts to shift attention away from policy outcomes towards future commitments, or "climate ambition."

In other words, where there should be a ruthless interrogation of neoliberal climate and energy policy and new approaches considered, governments continue to pursue carbon pricing, introduce more subsidies for private interests—including though "blended and concessional financing"—and promote P3s and other forms of privatization.

The survey presented below is organized around three relatively distinct periods:

- immediately before the 2007 financial crisis to around 2010 when the recession ended
- 2010 to the beginning of the pandemic in March 2020
- The pandemic period: March 2020 to the end of 2021

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100 For inadequate investment levels, see: *Energy Transition Commission, Financing the Transition: How to Make the Money Flow for a Net Zero Economy*, March 2023, at www.energy-transitions.org/publications/financing-the-transition.
See also Nicholas Stern, The Stern Review: The Economic of Climate Change, November 2006, at www.hm-treasury.gov.uk. Also see Nicholas Stern, New Climate Economy, Unlocking the Inclusive Growth Story of the 21st Century: Accelerating Climate Action in Urgent Times, 2018. According to Stern: "The evidence today shows that climate action is even more attractive than we imagined then [in 2006 when the Stern Review was published]. This remarkable new growth opportunity is now hiding in plain sight." Investors, warns Stern, risk missing a massive economic opportunity. "The train is fast leaving the station. Leaders are already seizing the exciting economic and market opportunities of the new growth approach…. Over US$26 trillion and a more sustainable planet are on offer, if we all get on board. The time to do so is now." p. 2.

101 IPCC, *Sixth Assessment Report*, August 2021, at www.ipcc.ch/report/ar6/wg1. See also: UNEP, *Emissions Gap Report 2020*, at www.unenvironment.org/resources/emissions-gap-report-2020.

# I. The 2007 Financial Crisis: Green Recoveries and Private Gain

The financial crisis that began in the summer of 2007 immediately led to calls for a major shift in global financial and economic management. In April 2009, G20 leaders committed to "lay the foundation for a fair and sustainable world economy [and]…to build an inclusive, green, and sustainable recovery."102 Developed country governments implemented a large-scale ($3.3 trillion) coordinated fiscal expansion to counter the effect of the crisis.103

During this period, the idea of green growth was also embraced by progressive as well as mainstream commentators and policymakers.[104] Echoing the current debates on COVID recovery policies, green growth and green recovery were frequently described as emblematic of a new era of economic management. An HSBC report noted that the economic crisis of 2007–2008 had "propelled ideas that were once on the margins of economic policy into the heart of decision-making: bank nationalization, quantitative easing and low-carbon recovery."[105]

Most of the stimulus packages put together by major economies to counter the impact of the 2008–2009 recession contained support for "green" projects and programs. In early 2009, the Democrat-controlled US Congress passed the $720 billion stimulus package known as the American Reinvestment and Recovery Act (ARRA).[106] More than $90 billion was directed towards growing renewable energy, battery storage, energy efficiency, and grid upgrades. In November 2008, China launched a $586 billion spending package. Almost 40% of the package was allocated to green projects (rail, grids, and water infrastructure).[107] In early 2009, the Australian Government announced a $42 billion Nation Building and Jobs Plan, about 8% of which was directed towards energy efficiency.[108] More than 80% of South Korea's $38 billion stimulus was dedicated to green investments.[109] One study estimated that governments had collectively allocated more than

102 Group of 20, "The Global Plan for Recovery and Reform," London, England, 2 April 2009.
103 E.B. Barbier, Building a Greener Recovery: Lessons from the Great Recession, United Nations Environment Programme, Geneva, 2020, p. 32.
104 From the left, see New Economics Foundation, A Green New Deal, July 2008, at https://neweconomics.org/2008/07/green-new-deal.
105 N. Robins, R. Clover & C. Singh, "A climate for recovery: The color of stimulus goes green," *HSBC Global Research* (2009): pp. 1–45, at www.globaldashboard.org/wp-content/uploads/2009/HSBC_Green_New_Deal.pdf.
106 H.R.1 - American Recovery and Reinvestment Act of 2009, at www.congress.gov/bill/111th-congress/house-bill/1/text.
107 N. Robins, R. Clover & C. Singh, "A climate for recovery: The color of stimulus goes green."
108 Australian Government, Australia's response to the global financial crisis, https://treasury.gov.au/speech/australias-response-to-the-global-financial-crisis.
109 N. Robins, R. Clover & C. Singh, "A climate for recovery: The color of stimulus goes green."

$430 billion in fiscal stimulus to addressing climate change."[110]

For many progressives, green recovery policies seemed like an important step in the right direction, a commonsense and forward-looking response to both the immediate impact of an economic recession and the need to take a longer-term view towards transitioning to a green economy. At the UNFCCC-convened COP15 in Copenhagen in late 2009—the official deadline to agree on a new global climate agreement to succeed the Kyoto Protocol—governments were keen to show that their immediate recovery and longer-term climate commitments were broadly aligned.

### *Spending Without Ownership: Green New Deals circa 2008–2009*

But the green recovery narrative also served to reinforce the existing climate policy framework, one that had been put in place during the Kyoto negotiations during the early 1990s.

In 2009, UNEP laid out its vision of a GGND. The success of such a deal would, said UNEP, be measured by its capacity to "unlock" private sector investment. However, addressing climate change, suggested UNEP, "may require financial incentives to enable the investors to earn a comparable risk-adjusted return." Stimulus money, they said, should be used to attract private sector investment, and governments should continue along this policy path over the longer term.[111] For UNEP and others, stimulus commitments should be "the first installment of further efforts by governments to use low-carbon growth as a key lever for economic recovery." [112] As we will see, UNEP would urge the same in 2020 regarding the period of pandemic relief and recovery spending.

Perhaps the defining feature of the green recovery plans of the 2008–2009 period was the willingness of governments to commit money that would ensure profits for the private sector *without* extending public ownership. This contrasts sharply with he original New Deal introduced by the Roosevelt Administration beginning in the mid-1930s, which offered plenty of incentives to private corporations aimed at creating jobs quickly, but also set its sights on the expansion of public ownership and regulation in order to permanently rebalance the economy in ways that served the public good, managed the growth of worker militancy and union organizing and, as it turned out, positioned the US as a hegemonic power.

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110 Ibid.

111 UNEP, "A Global Green New Deal", 2009; N. Robins, R. Clover & C. Singh, "A climate for recovery: The color of stimulus goes green."

112 N. Robins, R. Clover & C. Singh, "A climate for recovery: The color of stimulus goes green."

Roosevelt's New Deal sought to strengthen the power of government over the US economy and to reign in the power of capital, particularly the financial sector. The launch of the Tennessee Valley Authority (TVA) in 1933 and the Rural Electrification Administration two years later signaled an expansion of state assets and public control over a vital resource. More than an electrification project, the TVA was a development plan that would impact all sectors of the country's economy. The TVA, Roosevelt informed Congress, "should be charged with the broadest duty of planning for the proper use, conservation and development of the natural resources…for the general social and economic welfare of the Nation." [113]

In contrast to Roosevelt's approach, the Obama Administration's $720 billion ARRA package used public money to *expand* (not *constrain*) private sector revenues and assets. The $90 billion in green investments under the ARRA included an estimated $22.5 billion in tax credits for private wind and solar interests. Private renewable energy developers could opt to receive cash grants from the federal government, therefore turning what would have been unviable private sector projects into lucrative endeavors.[114] The idea that public money was merely helping wind and solar companies gain a foothold in the energy markets on the way to becoming competitive turned out to be false. Federal tax support for wind and solar has instead become a permanent arrangement, without which for-profit wind and solar would not be able to survive—an issue we return to later when we discuss the Biden Administration's Inflation Reduction Act passed by Congress in late 2022.

Long before Biden's climate bill became law, wind and solar companies were enjoying generous subsidies. In the case of wind power, $24.5 billion tax credits were awarded between 2007 and 2016. In 2017 alone, "lost" federal tax revenue amounted to $4.2 billion, and the extension of the tax credit for wind means that private wind companies will avoid at least $48 billion in tax payments by 2030.[115] Just fifteen wind companies received an estimated $19 billion in tax benefits during the 2007-2016 period. The largest wind energy developer, NextEra Energy—with approximately 10,000 wind turbines installed and annual revenues of $17.5 billion—received $7.8 billion in federal tax concessions in an eight-year period (2008–2015), making it one of the most subsidized Fortune 500 companies.[116] In the same eight-year period,

113 Franklin Delano Roosevelt, "A Suggestion for Legislation to Create the Tennessee Valley Authority" April 10, 1933, from *The Public Papers and Addresses of Franklin D. Roosevelt With a Special Introduction and Explanatory Notes by President Roosevelt, Vol. 2, The Year of Crisis, 1933, (*New York: Random House, 1938): pp. 122-129, at https://energyhistory.yale.edu/library-item/franklin-delano-roosevelt-suggestion-legislation-create-tennessee-valley-authority-1933.

114 N. Robins, R. Clover & C. Singh, "A climate for recovery: The color of stimulus goes green."

115 Angela C. Erickson, "The Production Tax Credit: Corporate Subsidies and Renewable Energy," Texas Public Policy Foundation, October 2018.

116 Bonner Cohen, The Heartland Institute, "Study: Renewable Energy Subsidies Costly to Taxpayers, Benefit Big Companies," 2109, at www.heartland.org/news-opinion/news/study-renewable-energy-sub-

NextEra Energy recorded profits of $21.5 billion. Just three manufacturers—General Electric, Vestas, and Siemens/Gamesa—account for 79% of turbines installed in the US from 2007 to 2017.[117]

### *The UNFCCC Secretariat: Subsidize Private Profit…Indefinitely*

Subsidizing profit continues to be central to neoliberal climate policy in the US, the world's major economies, and the multilateral institutions. Written in 2006—before the 2007 financial crash—and in preparation for COP13 in Bali, a UNFCCC Secretariat report titled *Investment and Financial Flows to Address Climate Change* identified the need to "secure public funds to optimize risk-return profile of mitigation measures in order to attract and leverage private funds, e.g., through public-private partnerships."[118]

Interestingly. the UNFCCC Secretariat re-released the same report in March 2009, as the world economy was still in a deep post-crash recession. The 2009 report was identical to the pre-crisis version, except for just three additional paragraphs that emphasized the need for "policy continuity." [119] In other words, the most severe economic downturn since the 1930s had no significant impact on climate policy.

But how long will the policy of subsidizing profit last? In 2009, the UNFCCC Secretariat asserted that the public-to-private financial flows should become a *permanent arrangement*, pointing out that recovery packages that prioritized shovel-ready clean energy projects would produce only short-term benefits. Such projects "provided little long-term support for de-carbonizing the world economy."[120] For the Secretariat, making subsidies permanent would, among other things, demonstrate a long-term commitment to private investors. This, it suggested, would be particularly important to the energy transition in the Global South where, it noted, "the risk-return profile is not attractive."[121] Put differently, temporary subsidies would not remove investor risk, whereas permanent subsidies—often described as "long term policy support"—would help address profitability concerns. The UNFCCC's Secretariat's report also urged governments to "finance RD&D [Research, Development and Deployment] when the private sector is not willing to invest owing to high risk."[122]

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sidies-costly-to-taxpayers-benefit-big-companies.

117 Angela C. Erickson, "The Production Tax Credit: Corporate Subsidies and Renewable Energy."

118 UNFCCC, "Investment And Financial Flows To Address Climate Change: An Update," at https://unfccc.int/resource/docs/publications/financial_flows_update_eng.pdf#page=3&zoom=auto,7,537.

119 UNFCCC, "Investment And Financial Flows To Address Climate Change," 2009, at https://unfccc.int/files/cooperation_and_support/financial_mechanism/application/pdf/background_paper.pdf.

120 Edward B. Barbier (lead author), Building a Greener Recovery: Lessons from the Great Recession, United Nations Environment Programme, 2020.

121 UNFCC, "Investment and Financial Flows To Address Climate Change," 2008, at https://unfccc.int/sites/default/files/resource/docs/2008/tp/07.pdf.

122 Ibid.

As we will see, if it was not clear in 2009, what is certainly clear today is this: the "mobilize the private sector" approach to climate protection has not mobilized much in terms of private investment, but the policy has extracted billions in public subsidies that ended up being used to line the pockets of private investors and multinationals without increasing public assets.

The 2007 financial crisis and the recession that followed therefore significantly reinforced the neoliberal policy framework that had been constructed during the Kyoto negotiations in the early to mid-1990s. The P3 model empowered (and enriched) the private sector, but it also normalized the idea that subsidies through P3s might well be long-term, and not simply a form of temporary government assistance to help start-up green companies get established in a competitive market. However, the crisis did not produce the turning point in global governance and economic management that many perhaps anticipated. As UNCTAD recently noted, "Once the balance sheets of the big international banks at the center of the [2007] crisis had been cleaned up and financial markets had regained their nerve, the advanced economies made the turn, in varying degrees, to austerity…the growing calls for a transition to a more climate friendly economy would go unheeded."[123]

But it is also important to emphasize that while the turn to austerity was a deeply regressive move, the stimulus measures and investment packages that followed the 2007 crisis strengthened the private sector. These measures did little to decarbonize the political economy. The eventual recovery in global economic growth saw emissions resume their upward trajectory.[124] Recovery economics is not climate friendly and merely serves to reinforce a policy framework that has demonstrably failed to deliver on climate and energy transition targets.

## II. 2007 to 2019: Multistakeholder Governance and the Solidifying of Corporate Control

Not everything returned to business as usual after the 2007 crisis. Key global institutions, among them the IMF, the World Economic Forum, but also UNEP and the UNFCCC, viewed the financial crisis as an opportunity to press for important changes in global governance. But the changes they had in mind were not of the kind that might free the multilateral system from the influence of large corporations and financial interests; rather, they

123 UNCTAD, *UNCTAD Trade and Development Report*, September 2021, page 11.
124 Statista, "Historical carbon dioxide emissions from global fossil fuel combustion and industrial processes from 1750 to 2020," at www.statista.com/statistics/264699/worldwide-co2-emissions.

wished to reshape global institutions in ways that gave those same interests more power, thus further undermining the role of governments in shaping the direction of global economic management and governance.

As we will see, "multistakeholderism" has helped conceal the failure of neoliberal climate and energy policy and marginalized those who today make the case for a change of course. It also further normalized the idea of long-term policy support for private investors and corporations.

### *From Shareholders to Stakeholders*

The World Economic Forum (WEF) set its sights on reforming systems of global governance and economic management. The neoliberal reforms of the 1980s and 1990s had given new powers to multinational corporations and large financial investors. These new powers required what the WEF described as a "new stakeholder paradigm of international governance," one that was "analogous to that embodied in the stakeholder theory of corporate governance on which the World Economic Forum itself was founded."[125] The 2007 financial crisis had exposed both the dangers and limits of shareholder capitalism which prioritized the needs of investors and extolled the virtues of free markets, while displaying its incapacity to address major crises that required long-term thinking and policy consistency.[126] Rejecting "market fundamentalism", the WEF aspired to reshape the multilateral system in ways that would allow corporations and investors to operate under a "new business model", one that would give space for CEOs to consider social and ecological considerations when making business decisions.

Reinforcing the message, in late 2007 an IMF paper titled *Global Governance: New Players, New Rules* declared that the financial crisis had shown that the structures and priorities of global governance were out of date. The IMF's Richard Boughton and Colin Bradford Jr. from the Brookings Institute declared, "We have inherited a system that is fragmented and that relies heavily, perhaps too heavily, on market forces… The problems and the challenges of the 21st century—[including] expanding the provision of safe and clean energy without aggravating climate change, alleviating health risks, and many others require a transition to a global system of reformed institutions and new governance mechanisms."[127]

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125 World Economic Forum, *Everybody's Business: Strengthening International Cooperation in a More Interdependent World*, at www3.weforum.org/docs/WEF_GRI_EverybodysBusiness_Report_2010.pdf.
126 James M. Boughton and Colin I. Bradford, Jr., "Global Governance: New Players, New Rules," IMF, at www.imf.org/external/pubs/ft/fandd/2007/12/boughton.htm.
127 IMF, Global Governance: New Players, New Rules, at www.imf.org/external/pubs/ft/fandd/2007/12/boughton.htm.

UN bodies, among them UNEP and the UNFCCC, also welcomed the stakeholder approach, regarding it as a more inclusive and diverse approach to addressing global crises. From their perspective, the shift away from state-centered multilateral system towards a "multistakeholder" approach promised to be both more stable and more acceptable to "civil society."

As Harris Gleckman and others on the left have documented, this shift undermined the role of governments and strengthened the influence of multinational companies over the multilateral system. This has grown to the point where so-called multistakeholder groups (MSGs) are not only dominated by large corporate and financial interests, these groups are making important decisions about governance and policy in ways that are unencumbered by the kinds of democratic accountability that most national governments are, in liberal political systems at least, typically subjected to.[128] Needless to say, a corporate takeover of the UN system poses a massive threat to the viability and legitimacy of the entire multilateral system. According to Gleckman and others, the UN system and other multilateral processes are being redesigned as a P3 where public institutions (including UNEP, the UNFCCC, etc.) cannot, or will not, question the designs and priorities of private corporations and financial interests.

## *Multistakeholderism and P3s*

However, one of the less well-known consequences of stakeholder capitalism was its capacity to protect neoliberal climate and energy policy from serious interrogation. The influence of corporate money served to deflect attention from failings that express themselves in inadequate levels of investment in low carbon energy, the virtual nonexistence of a carbon price, and the ever-rising levels of fossil fuel use and emissions.

The promotion of stakeholder capitalism as a more "inclusive and sustainable" alternative to shareholder capitalism afforded the World Bank and IMF an opportunity to repair the reputational damage each had incurred as a result of the popular reaction to the structural adjustment measures each had imposed on scores of poor countries during the 1980s and 1990s. Instead of dishing out austerity and driving the most vulnerable further into poverty, the Bank and the Fund sought to reinvent themselves as champions of sustainable development and poverty eradication, while continuing to promote privatization and the need for "an enabling environment" for business interests. This gave structural adjustment a greener and softer hue.[129]

128 Harris Gleckman, *Multistakeholder Governance and Democracy: A Global Challenge*, (Routledge, e-book 2018): p.11. www.routledge.com/Multistakeholder-Governance-and-Democracy-A-Global-Challenge/Gleckman/p/book/9781138502130.

129 World Bank, *Inclusive Green Growth: The Pathway to Sustainable Development*, 2012, at https://

Multistakeholderism became associated with a robust, no nonsense approach to climate change, a way around what appeared to be endless wrangling among government diplomats. But it also provided further cover for P3s. Situating P3s at the center of climate policy marked a significant change in policy. The *Stern Review* of 2006 had elaborated a sticks and carrots approach, where government disincentives and incentives would "send signals" to investors. But as we saw in Part Three, the sticks—principally carbon pricing schemes—have not significantly altered the investment strategies of large corporate emitters. Changes were therefore needed to compensate for the failure of carbon pricing. P3s allowed for governments to "de-risk" green private sector investment and thus guarantee profits for private corporations.[130] In so doing, the carrots morphed into a free lunch for private concerns, with public budgets paying the bill.

### *A New Development Model for the Global South?*

One of the main priorities of the multistakeholder approach was to offer a development pathway for the Global South that might provide an alternative to the carbon-intensive economic growth of the kind seen in China, India, and elsewhere.[131]

However, such a development pathway would also need to also address widespread energy poverty in regions like sub-Saharan Africa (SSA) and South Asia.[132] In 2010, roughly 1.2 billion people had no access to electricity, and more than half of those without electricity lived in SSA. According to one source, a green growth development model faced a "dual challenge—how to find ways to attract enough direct investment to meet the growing energy supply infrastructure needs of low-income countries to sustain their economic development, and to drive these direct investments towards lower carbon technologies so that countries are not locked into unsustainable paths for 30 to 50 years."[133]

These challenges were, and remain, formidable. Prior to 2010, investments in climate change mitigation and adaptation had barely registered in the South. The UNFCCC's so-called Clean Development Mechanism (CDM)

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documents.worldbank.org/en/publication/documents-reports/documentdetail/368361468313515918/main-report.

130 UNFCCC, Investment And Financial Flows To Address Climate Change, Yvo de Boer, Foreword and p.20, at https://unfccc.int/files/cooperation_and_support/financial_mechanism/application/pdf/background_paper.pdf.

131 Energy Information Agency (US), 2021, at www.eia.gov/outlooks/ieo.

132 The issues of energy poverty and the prospects for low carbon development will be explored in TUED's Working Paper 17 (Fall 2023).

133 Virginie Schwarz and Yannick Glemarec, "Energy Access and Climate Change Mitigation: Friends or Foes?" In *Rethinking Development in a Carbon-Constrained World: Development Cooperation and Climate Change*, Eija Palosuo, ed. (Finland: Ministry for Foreign Affairs, 2009)

that was designed to help business interests in the North offset the cost of their own emissions by financing "clean" projects in the developing world. But because of the limited global reach of carbon trading, the CDM has been unable to play a significant role in the implementation of the kind of green growth development that its advocates anticipated.[134] In elite policy circles, the hype that surrounded the CDM in terms of its potential to promote sustainable low carbon development has, in recent years, mostly disappeared.

Looking for new multistakeholder strategies to raise the level of climate friendly investment in the South, WEF established a Low-Carbon Prosperity Task Force in 2009. The Task Force proposed that the G20 or the UN "ask a group of leading investors, financial experts, and industry representatives to work with finance ministers" to launch, "a major public-private climate finance process" aimed at the rapid development of "public finance mechanisms to leverage private finance on the scale required." [135] But where would the investment come from? In contrast to "capital constrained" governments, institutional investors had more than enough capital to address the shortfall in climate-related investments that, in 2010, were already estimated to be in the range of $600 billion annually.[136] Institutional investors (such as pension funds, sovereign wealth funds, and insurance companies) were at this time managing assets of $75 trillion. Therefore, the Task Force reasoned that there was more than enough capital to bridge the $600 billion annual deficit many times over.[137,138]

By way of this simple reasoning, the WEF's Task Force assumed that "[i]f the terms and conditions of the public finance mechanisms are right [then] private institutional capital could be mobilized on a large scale" in ways that "will be 'returns-led' and not 'mission-led'." [139] Despite considerable

134 World Economic Forum Low-Carbon Prosperity Task Force, p. 478, at www3.weforum.org/docs/WEF_GRI_EverybodysBusiness_Report_2010.pdf. "For developing economies to grow within a low-emissions trajectory, system transformation will be required in crucial areas such as energy infrastructure, buildings, transport, agriculture and forestry. Such a transformation must begin now. Achieving this transformation will require significant inflows of public and private capital as soon as possible." For the Clean Development Mechanism, see https://unfccc.int/process-and-meetings/the-kyoto-protocol/mechanisms-under-the-kyoto-protocol/the-clean-development-mechanism.

135 World Economic Forum Low-Carbon Prosperity Task Force, at www3.weforum.org/docs/WEF_GRI_EverybodysBusiness_Report_2010.pdf.

136 IEA, 2016, at www.iea.org/newsroom/news/2016/september/world-energy-investment-2016.html.

137 R. Della Croce, and J. Yermo, "Institutional Investors and Infrastructure Financing," OECD Working Papers on Finance, Insurance and Private Pensions, No. 36, OECD Publishing, 2013, at www.oecd-ilibrary.org/finance-and-investment/institutional-investors-and-infrastructure-financing_5k3wh99xgc33-en.

138 By 2019, institutional investors' managed global assets had grown considerably larger, to an estimated US$92.6 trillion. OECD, 2019, cited by UNCTAD, at https://unctad.org/system/files/official-document/tdr2019_en.pdf.

139 Task Force Working Group on Accelerating Investment: Developing Countries, listed in the Task Force on Low-Carbon Prosperity report, at www3.weforum.org/docs/WEF_TaskForceLowCarbonProsperity_Recommendations_2009.pdf.

evidence to the contrary, the Task Force claimed that "[u]sing public money to help the private sector spread and reduce risk represents a more fiscally efficient means of committing public capital to low carbon programs in emerging economies."[140] Purportedly susceptible to making decisions based on short-term political calculations, finance ministers would, said the Task Force, need to be kept under control, thus ensuring that "private sector expertise will govern, deploy and manage the investment process."[141]

What was it that the WEF Task Force considered "more fiscally efficient?" Stripped to basics, the Task Force was proposing that governments (who are "financially constrained") should ask institutional investors (with lots of money) to enter into *political* P3s to develop investment plans that would use public money (which is in short supply, especially in the Global South) in ways that would be controlled by institutional investors (based in the North) so that these same investors could make still more money while both helping the poor and saving the planet.

More than a decade has passed since these proposals were made and, predictably, the results have been dismal. The investment deficit continues to grow, and particularly so in the South.[142] In countries where economic growth has been more robust, between 75%–80% of total primary energy demand is, of this writing, still met by oil, gas, and coal.[143] Meanwhile, energy poverty indices suggest that advances in electrification levels during the last decade or so (particularly in South Asia) have mostly been achieved by way of burning fossil fuels.

Meanwhile, almost 50% of the population of SSA still does not have access to electricity and the deployment of renewable energy and micro-grids by way of the P3 model has been painfully slow—which is a direct consequence of investor-focused neoliberal thinking. Only 7.4GW of solar and 5.7GW of wind power were operational in the entire continent of Africa in late 2019.[144] By way of comparison, Asia has installed 258GW of wind power and Europe 195GW. By 2020, Spain had installed more wind and solar capacity than 48 sub-Saharan African countries combined.[145]

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140 Ibid.

141 World Economic Forum Low-Carbon Prosperity Task Force, at www3.weforum.org/docs/WEF_GRI_EverybodysBusiness_Report_2010.pdf.

142 IEA, "World needs $48 trillion in investment to meet its energy needs to 2035," at www.iea.org/news-room/news/2014/june/world-needs-48-trillion-in-investment-to-meet-its-energy-needs-to-2035.html.

143 IEA and CCFI, *Energy Investing: Exploring Risk and Return in the Capital Markets*, March 2021, at www.iea.org/reports/energy-investing-exploring-risk-and-return-in-the-capital-markets, p. 8; IRENA, *World Energy Transitions Outlook: 1.5°C Pathway*, March 2021, at https://irena.org/publications/2021/March/World-Energy-Transitions-Outlook.

144 Institute for Development Studies, The African Climate Foundation, and The Open University, *Scaling China's Green Energy Investment in Sub-Saharan Africa: Challenges and Prospects*, Nov. 2021, Executive Summary. This report was funded by NRDC.

145 *A Joint Report by the International Energy Agency and the Centre for Climate Finance & Investment*,

### *Corporate Takeover of the SDG Process and the UNFCCC*

The process around the adoption of the UN's Sustainable Development Goals (SDGs) in 2015 provided another space to promote a multistakeholder approach. Succeeding the UN's Millenium Development Goals, the current SDGs, 17 in total, are designed to provide a development framework with set targets to address poverty, hunger, inequality, and other goals. SDG7 and SDG13 cover, respectively, affordable and clean energy and climate action. Governments formally committed themselves to work together alongside "multistakeholder partnerships" in order to reach the SDGs by 2030.[146] This reflected the prevailing view that governments on their own could not deliver the SDGs; they needed non-state actors (more accurately, large corporate and financial interests) to intervene in order to get the job done.

In July 2015, at the Third International Conference on Financing for Development which produced the Addis Ababa Action Agenda, issued a high-level call for "all businesses to apply their creativity and innovation" and to "engage as partners in the development process, to invest in areas critical to sustainable development, and to shift to more sustainable consumption and production patterns."[147] For their part, governments would continue "incentivizing the private sector" to create the "enabling environment to encourage entrepreneurship and a vibrant domestic business sector."[148] Similarly, the 2015 Paris Agreement was a victory for those seeking to change the multilateral system in ways that weakened states and gave more power and influence to non-state actors. The 2015 Agreement officially recognized the role of non-government stakeholders and called for the "scaling up and introduction of new or strengthened voluntary efforts and initiatives" and invited them to have policy input via "technical expert meetings."[149]

Taking the partnership between the UN and big corporations one step further, the UN and the WEF announced a Strategic Partnership Framework for the 2030 Agenda in June 2019. Its stated aim was to accelerate the implementation of the SDGs based on "a shared understanding of sustainable investing," and the need to "mobilize the private sector to scale

March 2021, p. 5. See also, Renewables Now, "Spain generates 43.6% of power from renewables in 2020," at https://renewablesnow.com/news/spain-generates-436-of-power-from-renewables-in-2020-725418/.

146 United Nations, 2015, https://sdgs.un.org/topics/multi-stakeholder-partnerships.

147 United Nations, Addis Ababa Action Agenda of the Third International Conference on Financing for Development, at www.un.org/esa/ffd/wp-content/uploads/2015/08/AAAA_Outcome.pdf. The final text of the outcome document adopted at the Third International Conference on Financing for Development (Addis Ababa, Ethiopia, 13–16 July 2015) and endorsed by the General Assembly in its resolution 69/313 of 27 July 2015.

148 Ibid.

149 UNFCCC, *The Paris Agreement*, 2016, at https://newsroom.unfccc.int/sites/default/files/resource/parisagreement_publication.pdf.

up green, renewable energy and energy efficiency investments" in the Global South.[150]

The formalization of the relationship between the WEF and the UN provoked an angry response from progressive groups. Signed by hundreds of organizations, an open letter in September 2019 warned that the UN-WEF Framework delegitimized the UN, weakened the role of states in global decision-making and compromised the UN's "independence, impartiality, and effectiveness in holding businesses to account."[151] In the words of Gonzalo Berrón of the Transnational Institute, "This agreement moves the world dangerously towards a privatized and undemocratic global governance."[152]

But the fact that the UN-WEF Framework had nothing new to say in terms of policy should also be cause for concern. The Framework provided not the slightest insight into why the policies now being proposed had over the years consistently failed to mobilize the investment private interests claimed they would deliver, if only governments would follow their advice.

In 2019, four years after the adoption of the Addis Ababa Action Agenda, the UN's Department of Economic and Social Affairs (ECOSOC) released its *Inter-agency Task Force on Financing for Development* progress report.[153] Representing sixty UN Agencies working closely with World Bank Group, the IMF, WTO, UNCTAD, and UNDP, the Task Force confirmed the distance between lofty goals and hard commitments.[154] In carefully chosen words, UN Secretary-General Guterres noted that "many key SDG investments remain unfunded. Private investments in infrastructure of developing countries, at $43 billion, are lower than they were in 2012." On the evidence presented in the 2019 report, wrote Guterres, "it is clear that the world will not achieve the SDGs without a fundamental shift in the international financial system that enables us to address urgent global threats and restore trust in international cooperation."[155]

The authors of the ECOSOC report, however, went further than Guterres. They noted that "there has been no major uptake in private investment levels…This relatively flat trend provides a reality check on expectations

150 World Economic Forum, The United Nations -World Economic Forum Strategic Partnership Framework for the 2030 Agenda, at https://weforum.ent.box.com/s/rdlgipawkjxi2vdaidw8npbtyach2qbt.
151 TNI, End the United Nations/World Economic Forum Partnership Agreement, at www.tni.org/en/article/end-the-united-nationsworld-economic-forum-partnership-agreement.
152 TNI, Society Organizations Worldwide Denounce World Economic Forum´s Takeover of the UN, at www.tni.org/en/article/hundreds-of-civil-society-organizations-worldwide-denounce-world-economic-forums-takeover.
153 United Nations, Inter-agency Task Force on Financing for Development, Financing for Sustainable Development Report 2019, at https://developmentfinance.un.org/fsdr2019.
154 Ibid.
155 Ibid.

for private investments. To date, the public sector largely dominates infrastructure spending in low- and middle-income countries, accounting for 87 to 91 per cent of infrastructure investments." Significantly, the report noted, "subsidies can make more projects 'investable,' but policymakers need to consider when privately-delivered infrastructure services are likely to offer better value for people than the public alternative."[156]

### *Blended and Concessional Finance: Unlocking Public Subsidies, Not Private Investment*

In 2018, the UNFCCC's Standing Committee on Finance noted that "the level of climate finance is considerably below what one would expect given the investment opportunities and needs that have been identified … There also remain longstanding concerns that high ratios of both co-financing and leverage may suggest that highly concessional public finance was not required in the first instance."[157] What makes a loan concessional is the fact that it is extended on terms substantially more generous than market-based loans. The concession is achieved either through interest rates below those available on the market, or through long grace periods, or through a combination of the two.[158] Public finance would then be "blended" with non-concessional private finance. According to the UNFCCC's Standing Committee, public concessional financing was a means to engage private interests in projects that would otherwise by commercially unviable. Public money was thus making projects "bankable" (and thus profitable). According to the Standing Committee, this was not a good use of public money because many such projects would have been profitable anyway.

Today, blended and concessional finance continues to be viewed as a crucial financial mechanism designed to unlock private sector investment, particularly in the Global South. Its advocates believe that it "has the potential to attract new sources of funding to address the biggest global challenges."[159] But more than simply de-risking private sector investments, blended finance amounts to a direct transfer of public funds into the hands of private developers in the hope that these same developers would be cattle-prodded into making much larger commitments in the future.

In a revealing formulation, the Addis Ababa Agenda noted that blended finance "combines concessional public finance with non-concessional

156 Ibid.
157 UNFCCC, Standing Committee on Finance, 2018 Biennial Assessment and Overview of Climate Finance Flows, at https://unfccc.int/topics/climate-finance/resources/biennial-assessment-of-climate-finance.
158 IMF, External Debt Statistics: Guide for Compilers and Users, Appendix III and Glossary, Washington DC, 2003, at http://www.imf.org/external/pubs/ft/eds/Eng/Guide/index.htm.
159 UNFCCC, Standing Committee on Finance, 2018 Biennial Assessment.

private finance."[160] In other words, governments should not expect private investors to issue concessional loans to promote sustainable development, because private investors must secure satisfactory returns on investments. Yet, it is somehow perfectly fine for governments to use public money in a concessional way, so that the private sector could benefit from being in the business of crises eradication.[161]

One of the striking features of the various efforts to find new ways of mobilizing private investment is how they all seem to end up back where they started. A working group consisting of representatives of the various development banks (sometimes known as development financial institutions, or DFIs) reported that, in 2017, development banks used blended concessional finance for projects valued at $8.8 billion. The working group reported that "[p]rivate sector finance mobilized for these projects was more than $3.3 billion, concessional funds committed were approximately US$1.2 billion, and DFI own-account investments was about US$3.9 billion."[162] In other words, the amount of private capital mobilized (US$3.3 billion) was less than the public money committed ($5.1 billion). On this evidence, rather than playing a *catalytic* role, public money is contributing the lion's share of this kind of project financing in the Global South, and at a drop in the ocean levels.

Exasperation with the private sector may continue to increase as the investment gap grows and more public money is used to leverage increasingly puny levels of private investment. Concern is fueled by an awareness of the fact that, as the direction of policy moves further in the direction of de-risking, the failure of the private sector to respond creates a rising level of political risk as subsidies mount but climate targets fall by the wayside.

## III: The Pandemic Period: Green Recovery 2.0

The remainder of this section will examine several developments at the multilateral level since the onset of the COVID-19 pandemic, again focusing attention on the key agencies, platforms, and processes.

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160 United Nations, Addis Ababa Action Agenda, para. 48, at https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=2051&menu=35.

161 The absurd features of this form of financing can be observed in a July 2021 analysis presented to the World Bank Group. It identified the need for "crowding-in and minimum concessionality," reasoning that scarce public funds should be deployed in a "catalytic manner, providing the minimum support necessary to make projects viable and attract as much private commercial finance as possible." This is because "markets started with concessional funds can become dependent on subsidies." See Arthur Karlin and Kruskaia Sierra-Escalante, *Blended Concessional Finance—The Benefits of Transparency and Access*, IFC/World Bank Group, July 2021, at www.ifc.org/thoughtleadership.

162 AfDB, ADB, AIIB, et al., *DFI Working Group on Blended Concessional Finance for Private Sector Projects: Summary Report*, IFC, 2017, at www.ifc.org/wps/wcm/connect/3aaf1c1a-11a8-4f21-bf26-e76e-1a6bc912/201810_DFI-Blended-Finance-Report.pdf?MOD=AJPERES&CVID=mpvbN7c.

Reminiscent of the immediate aftermath of the 2007 crisis, the economic impact of the pandemic produced calls for governments to look beyond immediate relief measures, to put in place, in the words of Stern and Stiglitz, "green fiscal recovery packages [that] can act to decouple economic growth from GHG emissions."[163] Of course, Stern and Stiglitz offered no evidence to support their assertion that green fiscal packages have ever, or will ever, decouple growth from emissions, if what is meant by decoupling is the ability of policy to facilitate an increase in economic growth while also reducing emissions levels.[164] But the fact that such assertions from the mainstream continue to go unchallenged speaks to the resilience of the current policy and the entrenched nature of the ideas and assumptions that continue to sustain it.

### *The Meaninglessness of Net Zero Targets*

The pandemic initially provided further impetus to the idea that a shift in global policy was long overdue, and a GGND was needed to facilitate the delivery of essential GPGs. However, it meant that the GGND became entangled with policy debates on the need for governments to authorize financial interventions.

During 2020 and 2021, the G20 countries injected roughly $14 trillion into their economies to mitigate hardship and to weaken the severity of the anticipated recession.[165] Political figures routinely referred to the need to use recovery funding to pursue the climate targets established under the Paris Agreement. By the end of 2022, countries and regions accounting for 76% of global emissions had committed to net zero emissions.[166] Intended or not, the adoption of more ambitious national targets shifted attention to the future when it would have been more appropriate to examine the missed targets and policy failures of the past, because if the short-term climate targets adopted under the Paris Agreement seem out of reach (as is currently the case) then how meaningful are the longer-term "net zero" targets?[167]

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163 Cameron Hepburn, et al., "Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change?" *Oxford Review of Economic Policy*, Vol. 36, Number S1 (2020): pp. S359–S381.

164 Further evidence of the partial downplaying to carbon pricing was evident in the World Bank's 2021 report on carbon markets. The report stated that "Carbon pricing can play a role in reaching net-zero emissions but on its own will not be sufficient to reach net-zero emissions." See: World Bank, *State and Trends of Carbon Pricing 2021*, 2021, at https://openknowledge.worldbank.org/handle/10986/35620.

165 G20's US$14-trillion economic stimulus reneges on emissions pledges. See www.nature.com/articles/d41586-022-00540-6; UNEP 2021, 'Are We Building Back Better?' at https://wedocs.unep.org/bitstream/handle/20.500.11822/35281/AWBBB.pdf.

166 United Nations: Climate Action, at www.un.org/en/climatechange/net-zero-coalition.

167 These concerns were expressed by the IPCC. See IPCC Sixth Assessment Report, August 2021, at www.ipcc.ch/report/ar6/wg1/.

Reporting on the distance between ambition and achievement, UNEP's *Emissions Gap Report* for both 2020 and 2021 stated that governments had "collectively failed to stop the growth in global GHG emissions" and have, since the pandemic, neglected to prioritize "a transformative low-carbon recovery."[168] Intended or not, UNEP's willingness to point the finger at *governments* also deflected attention away from private investors and the serious policy failures resulting from the promotion of P3s—an approach that UNEP has wholeheartedly and confidently endorsed for more than a decade.

UNEP's handling of questions of climate ambition provides a useful case study in the impact of entrenched thinking on climate policy. In 2009, UNEP launched a Finance Initiative, which it described as "a strategic public-private partnership" between itself "and approximately 180 financial institutions globally."[169] The Initiative noted that "the capital expenditure required … will have to be mobilized jointly by the public and private sectors; the lion's share of the investment is expected to come from the latter." However, if the private sector is to fulfill this expectation, it "will require a range of public policy measures including carbon markets and taxes, regulations and standards, as well as financial support mechanisms to mobilize private capital" and "particular attention needs to be focused on how to expand the flow of public and private finance to the developing world for both mitigation and adaptation."[170]

A full decade later, in October 2019, UNEP released its *Strategy for Private Sector Engagement* that identified several key objectives, among them being the need to ensure "an enabling environment for private sector entities, thus accelerating the momentum towards positive impact."[171] Significantly, the *Strategy* involved facilitating, "specific financial transactions, deals between public and private sector where the UN Environment Program plays a broker role."[172] In other words, the principal UN agency for the environment, UNEP, had by 2019 arrived at a point where it was not just promoting P3s but, as the *Strategy* suggests, intends to become an active partner with private sector interests. But the point to emphasize here is not UNEP's efforts to become a player in the P3 universe. Rather, it is its unswerving commitment to a blended finance policy that continues to fall dramatically short of its goals.

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168 UNEP, *Emissions Gap Report*, www.unenvironment.org/resources/emissions-gap-report-2020, at www.unep.org/resources/emissions-gap-report-2021.
169 UNEP, Financing a Global Deal on Climate Change, at http://www.unepfi.org/fileadmin/documents/FinancingGlobalDeal.pdf.
170 Ibid.
171 UNEP Strategy for Private Sector Engagement, 11 October, 2019, at www.unep.org/about-un-environment/private-sector-engagement.
172 Ibid.

### *Recovery as Climate Policy: What Has Changed?*

In June 2021, G7 leaders announced their Build Back Better World (or B3W) project, referring to GPGs and the need for "a new approach." But the proposals that emerged from the meeting were anything but new.[173] The G7 pledged to cooperate in "mobilizing private-sector capital in four areas of focus—climate, health and health security, digital technology, and gender equity and equality—with catalytic investments from our respective development finance institutions."[174] The European Green Deal (EGD) was announced by the European Commission in December 2019, just weeks before the outbreak of the pandemic. According to the European Commission, the EGD would "focus on sustainable finance and unlocking private investment."[175] By committing more than €600 billion in public funds, the Commission's goal was to increase "investor certainty" and the EU's "long-term competitiveness." [176]

In a March 2021 report, UNEP again lamented that recovery spending was not being used to accelerate the development of "green" economic sectors and practices in energy, transport systems, infrastructure, etc. "Overall, global green recovery spending has," said the report, "been incommensurate with the scale of the planetary crises of climate change, nature loss, and pollution."[177] If carbon was priced, suggested UNEP, "it could generate revenues for governments to pay for market-based incentives to foster green investments and technological innovation."[178] But what about developing countries where carbon pricing is currently nowhere to be seen? How would debt-burdened countries de-risk private investment? Developing countries needed "significant infusions of additional financing from major economies and international organizations."[179] However, "[e]xternal support [from development banks, etc.] provides an opportunity for funders to ensure that planned fiscal intervention is productive and meets long-term environmental, social, and

173 The Economist, "The G7 sketches a development-finance initiative to counter China's," at www.economist.com/international/2021/06/12/the-g7-sketches-a-development-finance-initiative-to-counter-chinas.

174 The White House, FACT SHEET: President Biden and G7 Leaders Launch Build Back Better World (B3W) Partnership, at www.whitehouse.gov/briefing-room/statements-releases/2021/06/12/fact-sheet-president-biden-and-g7-leaders-launch-build-back-better-world-b3w-partnership.

175 European Commission, Communication From The Commission To The European Parliament, The Council, The European Economic And Social Committee And The Committee Of The Regions, at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0550&from=EN.

176 European Commission, 'Fit for 55': delivering the EU's 2030 Climate Target on the way to climate neutrality. Brussels, 14.7.2021 550 final. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0550&from=EN.

177 UNEP, *Are We Building Back Better?* at https://wedocs.unep.org/bitstream/handle/20.500.11822/35281/AWBBB.pdf.

178 Edward B. Barbier, Building a Greener Recovery: Lessons from the Great Recession, UNEP.

179 Ibid.

economic objectives."[180] In other words, if Global South countries are to receive grants and loans from the development banks, it is the banks, not the governments themselves, who will determine what would qualify as a "productive" fiscal intervention.

At no point did UNEP's response to the pandemic question the viability of the current investor-focused policy. In common with other multilateral bodies, it attributes the widening gap between ambition and actual accomplishments to the fact that neoliberal policies are not being pursued aggressively or consistently enough. Investors need more incentives; carbon pricing schemes must proliferate and become more robust in their impact on polluters; subsidies for fossil fuels must be removed as quickly as possible; and governments must do more to create an enabling environment for private concerns. If government were resolute in implementing these policies the recovery would be both long-term and truly green. But if climate targets are missed (as they routinely are) it is governments, not private interests, who should be held responsible. UNEP's reasoning therefore protects the current policy from serious interrogation. The assumption that it is only the private sector that has the capacity to adequately finance the transition to a low carbon economy is never really challenged.

### *IMF: Same Song, Different Instruments*

Meanwhile, developments at the IMF initially raised hopes that, under Managing Director Kristalina Georgieva's leadership, the Fund might be reassessing its role as the no nonsense enforcer of fiscal discipline. Prior to the pandemic, the IMF had made it clear that it wished to do more to help developing countries do more to address climate change.[181] Appointed in September 2019, Georgieva described climate change as "a fundamental risk to economic and financial stability" and therefore a core concern of the IMF.[182]

In progressive circles, the IMF's interest in climate change indicated that the Fund was undergoing, in Stiglitz's words, "a progressive shift, with less emphasis on austerity, more on poverty and development, and greater awareness of the limits of markets."[183] Indeed, former IMF chief economist Kenneth Rogoff publicly criticized the Fund for "attempting to morph into

180 UNEP, *Are We Building Back Better?*
181 Georgieva speech to Climate Adaptation Summit, January 2021. Cited by Bretton Woods Project / Action Aid, IMF Surveillance and Climate Change Transition Risks: Reforming IMF policy advice to support a just energy transition, August 2021.
182 Ibid.
183 Project Syndicate, "A Coup Attempt at the IMF," at www.project-syndicate.org/commentary/coup-attempt-against-imf-managing-director-georgieva-by-joseph-e-stiglitz-2021-09.

an aid agency." Warning of the dangers to the global economy of a kinder and gentler IMF, Rogoff urged the IMF to recognize that "forceful IMF conditionality is essential to establish financial stability…The pandemic is not going away; nor should the traditional IMF."[184]

The Fund's interest in climate change was expressed in its 2020 publication *A Comprehensive Mitigation Package* that was based on "gradually phased-in carbon price increases."[185] It declared carbon pricing to be "a powerful tool to generate rapid and substantial emission reductions."[186] Later, in August 2021, the IMF described carbon pricing as "the most efficient mitigation instrument" and "the essential price signal for redirecting new investment to clean technologies."[187]

These statements are very revealing. The IMF's unswerving commitment to carbon pricing dates back a quarter of a century. In May 1998, the IMF had asserted that carbon pricing was "a major instrument for curbing greenhouse gas emissions that cause global warming."[188] And yet, in its *World Economic Outlook 2020*, the IMF noted that "the estimated effect of higher carbon prices was *far from statistically significant*—likely reflecting limited take-up of this instrument" (emphasis added).[189]

It is important to recognize what the IMF and others who remain faithful to carbon pricing are saying in these papers, which amounts to this: carbon pricing is the only economywide policy that can reduce emissions but, unfortunately, it is not working. This illustrates the degree to which the individuals and institutions that continue to promote ineffective and often counterproductive policies somehow manage to hide from the facts—including the facts that they themselves bring to public view. There has been no attempt on the part of the Fund to explain why a global price on carbon has yet to materialize, or why—where pricing schemes exist—the price is too low to register any significant impact on either investment patterns or emissions levels.[190] The reasons, however, are obvious. As a market mechanism, pricing carbon was supposed to "take carbon

184 Kenneth Rogoff, Why is the IMF trying to be an aid agency? January 3, 2020, www.project-syndicate.org/commentary/imf-acting-like-aid-agency-risks-embarrassment-by-kenneth-rogoff-2022-01?barrier=accesspaylog

185 IMF, Mitigating Climate Change, World Economic Outlook, Chapter 3, October 2020.

186 IMF Mitigating Climate Change, World Economic Outlook, Chapter 3, October 2020, p. 96.

187 Ian Parry, Simon Black, and James Roaf, "Proposal for an International Carbon Price Floor among Lage Emitters," IMF, June 2021.

188 Ved P Gandhi, Javier Cuervo, "Carbon Taxes: Their Macroeconomic Effects and Prospects for Global Adoption: A Survey of the Literature," IMF, May 1, 1998, at www.imf.org/en/Publications/WP/Issues/2016/12/30/Carbon-Taxes-Their-Macroeconomic-Effects-and-Prospects-for-Global-Adoption-A-Survey-of-the-2601.

189 Ibid, p. 91.

190 IMF, "2021 Comprehensive Surveillance Review—Background Paper on Integrating Climate Change Into Article IV Consultations," at www.imf.org/en/Publications/Policy-Papers/Issues/2021/05/18/2021-Comprehensive-Surveillance-Review-Background-Paper-on-Integrating-Climate-Change-into-460303.

out of competition." But pricing carbon incurs costs on doing business, and therefore cuts into profit margins. An incremental approach to the introduction of a global carbon price penalizes countries that move first and benefits those who do nothing.[191]

In another expression of entrenched thinking, the IMF's 2021 *Comprehensive Mitigation Package* proposed that developing countries introduce "an 80 percent subsidy rate on renewables production and a 10-year green public investment programme."[192] How could developing countries implement such a policy? The IMF has yet to provide answers, and there is no explanation for its "80% subsidy rate on renewables" proposal. Why 80%? And what might be the implications of this level of subsidy for public budgets and/or the profit margins of private concerns?

The IMF's climate proposals are naïve and half-baked. They amount to an attempt to put a progressive or green spin on its core policies, which includes power sector privatization and creating an enabling environment for private investors. Rather than take the opportunity to reflect on the impact privatization and blended finance has had on the prospects of a transition away from fossil fuels, the Fund will "advise" governments on how to deal with "public monopolies such as electricity grids that tend to be under-supplied by the private sector."[193] The pervasiveness of this anti-public policy was made clear in a 2021 study conducted by the Bretton Woods Project and Action Aid. The study concluded that, since the 2015 Paris Agreement, the Fund has explicitly advocated for the privatization of state-owned energy or electricity utilities in 40 countries.[194]

The fact that the IMF aspires to be a climate player in the multilateral policy space means that the Fund's decision to prioritize carbon pricing, market liberalization and privatization and to push for the removal of consumer subsidies for fossil-based energy (upon which hundreds of millions of poor people in the South depend) is not consistent with a "progressive shift."[195] On the contrary, what the IMF is pursuing is green structural adjustment and the perpetuation of climate and energy policy framework that conceals its failures behind the curtain of recovery economics.

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191 TUED Working Paper, "Carbon Markets After Paris: Trading in Trouble," March 2016, at https://rosalux.nyc/carbon-markets-after-paris.

192 IMF Mitigating Climate Change, World Economic Outlook, Chapter 3, October 2020.

193 IMF, "2021 Comprehensive Surveillance Review."

194 Bretton Woods Project / Action Aid, IMF Surveillance and Climate Change Transition Risks: Reforming IMF policy advice to support a just energy transition, August 2021.

195 See Sean Sweeney, "Weaponizing the Numbers: The Hidden Agenda behind the Fossil Fuel Subsidy Reform," New Labor Forum, , February 2020, at https://newlaborforum.cuny.edu/2020/02/01/weaponing-the-numbers-the-hidden-agenda-behind-the-fossil-fuel-subsidy-reform.

## The WEF's Great Reset and the "Resilient Energy Transition"

In June 2020, the WEF announced its Great Reset initiative as a response to the pandemic. Referencing the youth mobilizations for climate justice of 2019, WEF founder Klaus Schwab concluded, "People are revolting against the economic 'elites' they believe have betrayed them, and our efforts to keep global warming limited to 1.5°C are falling dangerously short."[196]

Calling for a "resilient energy transition," the Great Reset asserts that the fight against climate change will depend on public-private sector collaboration to "[s]cale up funding and de-risk investments made with multi-year and even multi-decade time horizons. This is crucial for emerging markets and new, clean technologies, where the economics are not yet competitive with more-established energy investments."[197]

The WEF's proposals are therefore indistinguishable from the kind of transition imagined by the IMF, the World Bank, the UNEP, UNFCCC, and most climate-related think tanks with various ties to private capital, such as Nicholas Stern's New Climate Economy.[198] All suggest that public money should continue to be used to de-risk private investment and thus guarantee profits. In a "stimulus" environment, the emphasis should move from relief interventions that meet short-term needs to "green restructuring" anchored in long-term P3 contracts.[199] Instead of competitive markets, there needs to be "partnerships" built around "risk mitigation" and (likely lucrative) long-term contracts for private interests and long-term costs and liabilities for public institutions.

### *Subsidizing Profit: Biden's "Historic" Climate Legislation*

From the perspective of a left GGND, the dangers of an undiscerning approach to investment were revealed in the way progressives in the US responded to the Biden Administration's domestic legislation (the Inflation Reduction Act, or IRA) that was signed into law in August 2022. The legislation was described by the White House as "the most aggressive action on tackling the climate crisis in American history."[200]

196 World Economic Forum, 2020, at www.weforum.org/events/world-economic-forum-annual-meeting-2020/about.
197 World Economic Forum, Fostering an Effective Energy Transition, at http://www3.weforum.org/docs/WEF_Fostering_Effective_Energy_Transition_2021.pdf.
198 The New Climate Economy, at https://newclimateeconomy.net/content/about.
199 World Economic Forum, Fostering an Effective Energy Transition.
200 US White House, www.whitehouse.gov/briefing-room/statements-releases/2022/08/19/fact-

Many progressives applauded the climate bill as a "game changer" for its "massive investment in renewable energy" (350.org)[201] and "the single biggest investment in climate action by Congress to date" (Sierra Club).[202] Some attributed the passage of the bill as a reflection of the strength of the climate movement in the US.[203] Environmental groups echoed studies that suggested that the tax credits would, by 2030, double the size of the renewables sector and reduce emissions by 40%.[204] However, the studies cited are careful to point out that the 40% reduction in emissions by 2030 is calculated based on 2005 levels. Allowing for emissions decreases since 2005, and future emissions reduction due to the anticipated retirement of coal-fired power stations, the IRA is expected to deliver a 10–15% cut in emissions by 2030 above what was already anticipated.

But this will only occur if the private sector responds to the subsidies made available by the legislation.[205] The IRA legislation extends $369 billion in "direct pay" tax credits to renewable energy, battery storage, electric vehicle companies, and so on. This type of subsidy functions as a direct grant to any entity that produces renewable energy. For wind and solar interests, tax credits totaling $128 billion will extend to 2032.[206] A spring 2023 Brookings Institute analysis of the IRA estimated that it would pull in the private sector in ways that would inflate the cost of the subsidies to $780 billion by 2031.[207] The IRA makes available public money to make profitable renewable energy projects that would not otherwise be profitable and would, therefore, not exist.

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sheet-the-inflation-reduction-act-supports-workers-and-families/.

201 For 350.org's endorsement, see https://350.org/press-release/congress-ira. "In particular, we are heartened by the massive investment in renewable energy that will speed up the U.S. economy's fossil free transition and significantly reduce emissions." The Nation's response was also extremely positive: www.thenation.com/article/environment/environmental-justice-inflation-reduction-act.

202 Sierra Club, "Signing of Inflation Reduction Act Marks a Watershed Moment," at www.sierraclub.org/press-releases/2022/08/signing-inflation-reduction-act-marks-watershed-moment.

203 Sierra Club, "MEMO: Real-World Benefits of the Inflation Reduction Act's Historic Climate Investments," at www.sierraclub.org/press-releases/2022/08/memo-real-world-benefits-inflation-reduction-act-s-historic-climate.

204 Volts, "Volts podcast: what to make of the Democrats' last-minute climate bill," at www.volts.wtf/p/volts-podcast-what-to-make-of-the#details; PERI, "Job Creation Estimates Through Proposed Inflation Reduction Act,' at https://peri.umass.edu/publication/item/1633-job-creation-estimates-through-proposed-inflation-reduction-act; Rapid Energy Policy Analysis and Evaluation Toolkit [REPEAT], "Preliminary Report: The Climate and Energy Impacts of the Inflation Reduction Act of 2022," at https://repeatproject.org/docs/REPEAT_IRA_Prelminary_Report_2022-08-04.pdf.

205 Shannon Osaka, "Why the climate bill's impact might not match what many expect," *The Washington Post,* at www.washingtonpost.com/climate-environment/2022/08/18/ira-inflation-reduction-act-climate-change.

206 Tax Provisions in the Inflation Reduction Act of 2022 (H.R. 5376) Updated August 10, 2022, at https://crsreports.congress.gov/product/pdf/R/R47202. Sections 13501, 13502, 50142, 50143, 30001.

207 Brookings Institute, Economic Implications of the Climate Provisions of the Inflation Reduction Act, March 30-31, 2023, at www.brookings.edu/wp-content/uploads/2023/03/BPEA_Spring2023_Bistline-et-al_unembargoedUpdated.pdf. See also, *Wall Street Journal*, Green Tax Credits Are Likely to Be More Popular—and Expensive—Than Expected, at www.wsj.com/articles/green-tax-credits-are-likely-to-be-more-popularand-expensivethan-expected-1358420b.

### *Bernie Sanders and Public Ownership*

Either way, the Biden bill fortifies neoliberal policy; it does not break with it. According to energy finance scholar Sarah Knuth, "Fiscal exploitation [has been] crucial to US renewables' long neoliberal legacy" and "federal tax subsidies have essentially paid wealthy individuals (in the 1980s) and even wealthier tax equity players (from 2005 to present) to invest in renewable energy on the government's behalf." [208] She continues:

> This tax shelter-based model has offered up US renewable energy for regressive financing practices and problematic distributional outcomes—diversions from the public purse, rentier extractions in project deals, financial gatekeeping in who develops and owns renewables in the United States. The last favors increasing concentration in US renewables development and ownership.[209]

The IRA is not compatible with a left GND. It stands in contrast to the approach of US Senator Bernie Sanders who, during his 2020 presidential campaign, pledged that, if elected, "renewable energy generated by the Green New Deal will be publicly owned," and his administration would support publicly owned and regulated utilities that serve the public good.[210] During this period, Democrats loyal to the neoliberal script worked hard to intercept the rising levels of activism around public ownership of energy. "No government is going to solve this problem," said Biden's special presidential envoy for climate, John Kerry in March 2021. "The solution," he added, "is going to come from the private sector, and what government needs to do is create the framework within which the private sector can do what it does best, which is allocate capital and innovate and begin to take the framework that's been created."[211]

Interestingly, Sanders criticized Biden's IRA for its support for fossil fuel projects and for other provisions that encourage future oil and gas extraction in the US.[212] But Sanders appeared to accept the main budgetary items in the legislation, namely generous tax credits for private renewable energy concerns. Advocates of a GND in the US might wish to consider what $369 billion in subsidies for private concerns might have delivered had

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208 S. Knuth, "Rentiers of the low-carbon economy? Renewable energy's extractive fiscal geographies," *Environment and Planning A: Economy and Space*, *0* (0), 2021, at https://doi.org/10.1177/0308518X211062601.

209 Ibid. As Knuth points out, this will allow private financiers to play to role of gatekeepers, choosing which technologies to finance such as onshore wind, solar photovoltaic, increasingly offshore wind), very large utility-scale projects, which "structurally excludes many kinds of renewable energy project—distributed and small-scale projects; small private, public, and non-profit developers and owners—and continues to marginalize sites and communities deemed risky or unprofitable."

210 BernieSanders.Com, The Green New Deal, at https://berniesanders.com/issues/the-green-new-deal.

211 Zack Budryk, "Kerry: 'No government is going to solve' climate change," *The Hill*, at https://thehill.com/policy/energy-environment/545125-kerry-no-government-is-going-to-solve-climate-change.

212 Bernie Sanders, "Prepared Remarks: Sanders Says Inflation Reduction Act Doesn't Meet Needs of the American People," at www.sanders.senate.gov/press-releases/prepared-remarks-sanders-says-inflation-reduction-act-doesnt-meet-needs-of-the-american-people.

it been directed towards deploying low carbon energy options, especially if accompanied by public works programs directed at energy conservation and efficiency.

From a public ownership perspective, the bill is positive in one potentially significant respect. Whereas in the past, public non-profit utilities were ineligible for the tax credits (for the simple reason that they do not pay taxes to the federal government), Biden's bill allows for public cooperative utilities (which date back to the New Deal) to qualify for the credits, opening the possibility of direct public ownership of wind and solar capacity.[213] According to the Center for Public Enterprise, the availability of cheaper sources of financing to public entities means that this provision in the IRA could open the door to public energy in the future.[214]

### *Assessing the Impact and its Significance for a Left GGND*

In terms of the effort to imagine and propose a viable left GGND, there is a need to go beyond an investment-focused approach, one that pushes the issue of ownership to the margins or ignores it altogether.

From the analysis presented above, three points are worth emphasizing:

The last decade has seen more emphasis on the role of governments in de-risking private investments. This shift is important in that government has largely relinquished its "sending signals to the market" role. The sticks (carbon taxes and fees) have been dispensed with and the carrots have been blended into a perpetual free lunch.

Despite the emphasis on de-risking, private sector investment remains inadequate when viewed alongside the levels of investment needed to reach climate targets and the SDGs. There is simply no way to make the kind of money from the energy transition or the development of low-carbon solutions that private investors expect to see. Public investment as a means of subsidizing profit is unlikely to "unlock" the levels of investment needed when, as one pro-business source expressed it, "the risk-return profile is not attractive."[215] This is particularly obvious in the case of the Global South,

213 According to the National Rural Electric Cooperatives Association (NRECA), because public utilities were not eligible for tax credits, co-ops have had to partner with for-profit businesses that are eligible. Responding to the Biden bill, one cooperative CEO (Eric Jung) said, "We could sit down at the table to negotiate a deal, but it's difficult to get a good deal when the other side knows that only they can take advantage of the tax incentives … Now, we can negotiate on equal footing … It's going to be absolutely huge in helping us own these assets." At www.electric.coop/house-passes-direct-pay-incentives-for-co-ops.
214 Chirag Lal, Direct pay: an uncapped promise of the Inflation Reduction Act, Center for Public Enterprise, March 2023, at www.publicenterprise.org/reports/direct-pay-uncapped-ira.
215 UNFCCC, "Investment And Financial Flows To Address Climate Change," 2008, at https://unfccc.int/sites/default/files/resource/docs/2008/tp/07.pdf.

where private sector investment in the green economy has been miniscule.[216]

Third, the failure of the private sector to respond to the incentives to invest is beginning to cause frustration in some parts of the UN system (UNDP, ECOSOC, and UNCTAD). For some, the frustration is aimed at governments who are allegedly *not doing enough* for the private sector. For others, the frustration is directed towards the private investors themselves.[217] How significant this frustration is in terms of contributing to a change in policy remains unclear. The corporate takeover of the multilateral system has created an echo chamber for the familiar policy mantras. Rigorous interrogation is not encouraged, even though the failures get more obvious and increasingly consequential with the passage of time. Either way, advocates of a Left GGND can fuel this frustration by illustrating the need to connect public investment to the expansion of public ownership and thus anchor a global public goods framework in direct public interventions in key economic sectors, with energy being the main priority.

## Conclusion: Looking at Investment as if Class (and Political Power) Mattered

Part Four attempted to provide a survey of the evolution of neoliberal energy and climate policy and the shifts in elite thinking over the past twelve to fifteen years. The account shows how this policy has been shaped by key multilateral institutions, among them the IMF, the World Bank, the WEF, UNEP, the UNFCCC, and others. The changes that have occurred—particularly green recoveries and the rise in multistakeholder interventions in policy—have helped to sustain the current energy policy framework and conceal its monumental failures.

Advocates of a left GGND need to be fully aware of these failures. Recovery is better than austerity, but it will do nothing to address climate change or meaningfully advance the transformative goals of the GGND. Equally important, it is necessary to acknowledge that more public investment is, given the current policy and its emphasis on de-risking, not the solution and, for the reasons discussed above, may make matters worse.

The recovery packages following the crisis of 2007 and the economic impact of COVID19 pandemic both helped conceal the failures of neoliberal

216 IEA Special Report, *Financing Clean Energy Transitions in Emerging and Developing Economies* (EMDEs), June 2021 at www.iea.org/reports/financing-clean-energy-transitions-in-emerging-and-developing-economies.

217 Adva Saldinger, Blended finance's role in SDGs depends on these changes, 12 April, 2019, at www.devex.com/news/blended-finance-s-role-in-sdgs-depends-on-these-changes-94692.

climate and energy transition policy in ways that are highly relevant to current and future discussions on the GGND and GPGs. The climate dimension of those recoveries used public money to sustain private sector companies in renewables, battery storage, hydrogen, capture technologies, etc., at levels that were considerably higher than those in the early 2000s, had become the norm. It should now be clear that investment, in this context, extended the life of a policy framework that has been ineffective from a climate standpoint and often regressive in its impact on workers and communities.

But the failures of the neoliberal climate and energy transition policy cannot be concealed indefinitely, and declarations of climate ambition will become less reassuring as targets continue to be missed and the IPCC's proposed timeframes become increasingly implausible. Today, signs of exasperation with the private sector are becoming increasingly evident. Achim Steiner, administrator of the UNDP, recently stated, "big financial sector players are becoming a liability for all of us … With about $300 trillion in wealth in the world today, there is enough finance to address the SDGs [Sustainable Development Goals] but financial markets must change in order to do so."[218] Announcing the *Emissions Gap Report 2022,* UNEP's Executive Director Inger Andersen said, "We have missed the opportunity to invest in a low-carbon recovery from the COVID-19 pandemic…We had our chance to make incremental changes, but that time is over. Only a root-and-branch transformation of our economies and societies can save us from accelerating climate disaster." She added*,* "I urge everyone in the private sector to start reworking their practices. I urge every investor to put their capital towards a net-zero world."[219] Using stronger language, a video message from UN Secretary Guterres following the launch of a recent IPCC report in April 2022 remarked, "Some Government and business leaders are saying one thing, but doing another. Simply put, they are lying."[220]

Aiming criticisms at private investors, corporations, and government leaders makes headlines and is often appropriate. But what is needed now is an alternative. Financial markets are not going to change in the face of the climate crisis, and neither are private investors going to invest in projects that do not make sufficient returns on investment. This is the nature of capitalism. And a policy framework that relies on ever higher volumes of public money to guarantee profits but leaves final investment decisions to private interests

218 Adva Saldinger, Blended finance's role in SDGs depends on these changes, 12 April, 2019, at www.devex.com/news/blended-finance-s-role-in-sdgs-depends-on-these-changes-94692.

219 UNEP, *Emissions Gap Report* 2022, Foreword by *Inger Andersen,* Executive Director, UNEP, at www.unep.org/resources/emissions-gap-report-2022.

220 UN Press Release, April 4th, 2022, Secretary-General Warns of Climate Emergency, Calling Intergovernmental Panel's Report 'a File of Shame', While Saying Leaders 'Are Lying', Fuelling Flames. https://press.un.org/en/2022/sgsm21228.doc.htm

offers no solution, and it will be difficult to sustain indefinitely. This approach has been tried again, and still again. Carrots, sticks, green bonds, blended finance, concessional loans, cascade financing, new large-scale asset classes—the instruments proliferate but the results consistently fall short. It is difficult to recall a time in modern history when so much public money been used to "unlock" such little capital investment from private interests.

Previous TUED papers have drawn attention to the multiple failures of neoliberal climate and energy policy and the need for a public pathway approach anchored in the public ownership of energy.[221] Part One of this paper summarized the case for public ownership of energy from a climate perspective. It also explained why a *comprehensive reclaiming* approach to extending public ownership is essential, encompassing power generation, transmission and distribution. It should also be extended to incorporate energy-related R&D, key technology supply chains (in wind, solar, and nuclear power) adaptation services, and energy efficiency and conservation.

Without an expansion of public ownership, a left GGND framework will remain unbalanced and unstable. Its climate goals, as well as its commitment to equity and international cooperation, will be severely (if not fatally) compromised. For a left GGND, the main political focus should therefore be on changing the mandate of public companies while at the same advocating for the strategic renationalization of energy systems. Operating within a neoliberal policy framework, public companies are currently obligated to act like profit-making companies that are loyal to shareholders and not, in many instances, to the broader public or the shared environment. The transition away from fossil fuels is therefore inconceivable without a reform agenda that can demarketize public companies and reconstitute energy planning.[222]

## The New Uncertainty

Of this writing (early 2023), calls for a GGND and GPGs approach have lost momentum due to the impact of the war in the Ukraine, concerns about energy security, and the specter of a new wave of austerity and a new debt crisis facing low-income countries. In 2022, rising energy and food costs and purported fears about inflation saw governments rein in spending.[223] A 2022 survey estimates that, in 2023, 85% of the world population will be living

221 TUED, Working Papers Series, available at www.tuedglobal.org/tued-working-papers.
222 For a more detailed discussion, see Sean Sweeney and John Treat, "Beyond Disruption," TUED Working Paper 14, Part Three, at https://rosalux.nyc/beyond-disruption-how-reclaimed-utilities-can-help-cities-meet-their-climate-goals.
223 The IMF says current inflation levels are the highest in 38 years. See https://blogs.imf.org/2022/04/27/inflation-to-be-elevated-for-longer-on-war-demand-job-markets.

under austerity measures. In all, the report shows that 143 countries—94 of which are developing nations—are pursuing austerity, often at the urging of the IMF.[224]

Clearly, the discussion on the GGND and GPGs has entered a new phase. For some, the war in the Ukraine and dependency on Russia as a major supplier of oil and gas underscore the need to find ways to move beyond fossil fuels at a faster pace.[225] In April 2022, UN Secretary-General Guterrez urged that the current energy supply crisis be considered an opportunity: "We must work towards progressively phasing-out coal and other fossil fuels, and accelerating the deployment of renewable energy and a just transition."[226] But the energy crisis has also led to calls for more oil and gas exploration and extraction in Europe, the United States, and elsewhere—a message that has been amplified by fossil fuel interests who, of this writing, are enjoying record profits as demand for energy exceeds supply.[227]

But, as previous TUED papers have pointed out, this "renewable energy good, fossil fuels bad" framing is problematical from a left standpoint. The key is to *control* energy, plan the energy transition, pivot towards energy efficiency and conservation, support climate change adaptation, and take profit out of energy in the same way profit should be taken out of health care, education, public transport, and other vital public services.

Despite the current challenges and uncertainties, calls for a progressive policy shift at the global level will not go away. The terms Global Green New Deal and global public goods may themselves fall out of favor, or they may continue to resonate in certain contexts. Either way, there is little doubt that energy transition and climate change will continue to be at the center of political discourse and progressive activism for years to come. Political and social struggles around energy are likely to become much more intense in future. Initially triggered by Russia's invasion of the Ukraine, government interventions around energy supply, prices, and shaping future generation capacity have created new political opportunities to reclaim energy to public ownership.

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224 Isabel Ortiz and Matthew Cummings, *End Austerity: A Global Report on Budget Cuts and Harmful Social Reforms in 2022-25*, at www.eurodad.org/end_austerity_a_global_report.

225 IRENA, Energy Transition Holds Key to Tackle Global Energy and Climate Crisis, 29 March 2022, at https://irena.org/newsroom/pressreleases/2022/Mar/Energy-Transition-Holds-Key-to-Tackle-Global-Energy-and-Climate-Crisis.

226 United Nations, https://press.un.org/en/2022/sgsm21236.doc.htm.

227 CNN, Biden administration announces it will resume onshore oil and gas lease sales with higher royalty rate, April 15, 2022, at https://edition.cnn.com/2022/04/15/politics/biden-interior-oil-and-gas/index.html. For oil and gas profits, see www.accountable.us/news/report-oil-giants-post-eye-popping-205-billion-record-profits.

www.rosalux.nyc