Clean Tax Cuts & Clean Free Market Policy Innovation

Rather than introducing more and more roadblocks in the economy, environmental policies have to zero in on reducing barriers and expanding freedoms to make it easier to be environmentally aware and innovative. Exploring opportunities, from tax to trade policy, is dearly needed.

Most economists are not yet aware of the newest market environmentalist paradigm: clean free market policy – which some experts believe may prove more efficient, impactful, popular, and economically beneficial than conventional policy options. These ideas can be implemented anywhere, in any country, or even internationally, harnessing the power of the market to create better environmental outcomes.

The Origins of Clean Free Market Policy Innovation

In just this past decade, utility-scale renewables have passed a tipping point, becoming cheaper than fossil fuels, with unsubsidised profits growing for the best sited projects. That development implies three things:

First, the original assumption behind conventional climate policy, that clean energy technologies could not survive without some price adjustment mechanism, is now untrue, out-of-date, and growing increasingly off-base, as entrepreneurs continue to drive down costs faster than predicted. Other barriers, such as bureaucratic and incumbent-monopoly arrangements, as well as technological constraints on dispatchability, have now become the most important barriers blocking deployment of clean technologies, more so than price.

Second, with the advent of competitive clean technologies, the basic free market policy of removing barriers to competition and market access could now become the first best way to accelerate increasingly profitable energy innovation and directly remove key roadblocks to emerging environmental solutions.

Third, if clean technologies have new and growing profits, then taxes on those profits impose a major barrier to further capital mobilization. Investment tax rate reduction presents a new policy lever we can pull, which would have the powerful effect of accelerating capital flows and increasing prosperity, innovation, participation and competition, while driving down the cost of clean solutions.

Considering this development, a new approach called Clean Free Market Policy (CFM policy) has become viable. It expands freedom, removes barriers, and opens markets, in order to allow low-cost clean innovators to compete and win. When applied fiscally to tax barriers, the term Clean Tax Cuts (CTC) indicates the policy of reducing marginal tax rates for private clean investments while also, directly and indirectly, incentivising competition, participation, innovation, and open markets.

Classical & Neo-Classical Roots of a New Idea

Clean free market policy is a surprising application of laissez-faire – the core 17th century free market policy principle that led to and underpins modern democratic capitalism and classical economics. It applies laissez-faire to the problem of pollution and negative externalities. It is a surprising application, because laissez-faire is often described as a government non interference policy, so is sometimes blamed for allowing and accelerating pollution. But that is a misconception, a perverse way of thinking about or implementing laissez-faire. Laissez-faire does not mean the legalization of murder or well-poisoning, nor the promotion of unjust private privileges either to pollute at public expense, or to block beneficial competitors through political power.

Rather, laissez-faire describes a freedom expanding policy innovation strategy: as new challenges arise, we should first and foremost expand freedom and minimize barriers for universal participation in harmless, beneficial activities. This delivers a popular consensus that reduces polarization and gridlock, because it offers all carrots, and no sticks. Moreover, laissez-faire carrots are not conventional subsidies, but rather expanded liberties: at once an empowerment-maximizing strategy, but also the least-harm approach, if properly applied. If the Holy Grail of climate policy is a new method to mobilize trillions of dollars for capital investment for a global transition to clean infrastructure, then obviously harnessing the laissez-faire principle that created the phenomenal growth engine of capitalism should be considered perhaps the essential solution.

Conventional climate policy falls short precisely because it ignores the laissez-faire principle by raising barriers and restricting freedoms. More sticks than carrots, it drives its own opposition and gridlock. Conventional climate policy departs from classical principles because it is heavily influenced by the neoclassical ideas of Arthur Pigou, the British economist who first described pollution as a 'negative externality,' the costs of which are not captured in the price of goods. Pigou urged Pigouvian taxes; the solution of 'pricing' the externality by inflating the cost of the goods with a pollution tax, like a carbon tax, a proposal debated.

Clean free market policy blends laissez-faire and Pigouvian solutions. Yes, pollution externalities create a free rider problem that must be corrected to level the economic playing field – but dropping barriers to clean solutions may sometimes work better than imposing inflationary tax burdens on polluters and consumers. Especially when price is no longer the most important barrier to decarbonisation, and while fossil fuel demand remains highly inelastic, as a result of technical and anti-competitive barriers.

CTC and Clean Free Market Policies were conceived as an alternative kind of supplyside, reward-based pollution pricing – a tax rate cut (plus expanded liberties) for beneficial, pollution-reducing investments.

CTC/CFM is designed to make mitigation, adaptation, and reversal all more affordable, whilst being more politically palatable and generating less opposition and gridlock by using all carrots, and no sticks. CTC/CFM overcomes the most critical barriers to transition, by directly incenting innovation and breaking down bureaucratic market restrictions at the same time. It expands clean markets in ways conventional climate policy cannot.

Let's first take a look at the clean free market proposal that most eloquently proclaims the link between climate action and freedom, then consider how CTC mechanisms can open markets.

"Competition offers a powerful on-target solution for both climate and poverty."

The Declaration on Energy Choice & Competition

If clean technologies can now compete and win, then we need to open closed markets by removing barriers to participation. That's the core proposal of clean free market policy, and an insight that several free market think tanks have distilled into a civil society Declaration on Energy Choice & Competition. The Declaration calls on government leaders to protect everyone's right to produce, buy, or trade the clean, reliable energy of their choice, and remove barriers to energy competition.

Uncompetitive energy sectors, worldwide, not only pose a critical path barrier to affordable clean energy deployment and innovation, but also to any hope for development and prosperity. Even in developed countries like the United States, studies show that competitive power markets decarbonise faster and cheaper than uncompetitive markets. But worldwide, the situation is dire. In many developing countries, expensive, crony-dominated monopoly utilities often deliver energy poverty and rolling blackouts. Globally, 2.5 billion people must cook, heat and light their homes using dirty fuels, causing 3.8 million deaths (mostly women and children) each year. In too many nations, no actual development is even possible, because there's no reliable power hook up. This critical path barrier drives pollution, poverty, mass migration, black markets, violence, and high emissions globally. Competition offers a powerful on-target solution for both climate and poverty.

To date, this key climate action barrier – uncompetitive energy markets – has been largely ignored as an international issue. Yet, a few intrepid pioneers have taken this on in places as diverse as Lebanon and Honduras. Fundación Eléutera is successfully guiding a transformation of the Honduran power sector into a competitive market that looks much like ERCOT in Texas. The Declaration, inspired by such brave efforts, argues that the time has come for world leaders to address this with priority, via international agreements that open up energy and power markets to competition in order to unblock innovative solutions to climate and poverty. There is thus also a ground-breaking role to play for international pro-market and environmental think tanks on a coordinated policy initiative across many nations at once.

In light of the principles put forward in the Declaration on Energy Choice & Competition, and the fundamental importance of opening markets to competition, let's take a look at one of the most basic Clean Tax Cuts proposals, to understand how laissez-faire and Pigouvian principles come together as a new strategy for sustainable, pro-growth fiscal policy.

Clean Tax Cuts for Clean Product Innovation

Clean Tax Cuts are marginal tax rate reductions on returns from clean free enterprise. As David Parham, an expert in sustainable accounting, pointed out during the very first CTC charrette, CTCs would be easiest to apply, and would work very well, in industries like the auto sector, where the metrics of sustainability are well understood and reported, and key stakeholders are motivated by profits.

In the US, for instance, thanks to Corporate Average Fuel Economy (CAFE) standards, we know the average vehicle fleet emissions for every automobile manufacturer. It would be a simple matter to take that one number, and turn it into a tax rate: the lower the fleet emissions, the lower the tax rate. If applied to all business and investor taxes, that would provide a very powerful mechanism to drive the automobile industry ever-cleaner. Firms with cleaner feets would gain a competitive advantage. Consumers would see lower, not higher, prices for low-emission vehicles. All investors, large and small, could participate in such sustainable investments. Since investors, management, and employees have stock packages, CTCs would align corporate culture, from boardroom to shop floor, with the goal of lower emissions.

The Clean Tax Cuts for Clean Product Innovation (CTC-CPI) model can work very well in any sector with well-defined metrics and stakeholders motivated by profits and taxes. In the power sector, it could motivate the sale of low-or-zero-emission power and tech-neutral innovation to deliver the best solution for any given market. In real estate, it can motivate tech-neutral low-emission construction and renovation.

Pros & Cons of Tailorability

CTC-CPI has strengths and weaknesses. It can deliver great tailored, industry-specific solutions. It offers an excellent, targeted incentive for tech neutral innovation. It creates incredibly participatory incentives, easy to use beneficially by all investors, consumers and companies.

Tailorability is really important, because CTCs can be tailored to take on very thorny problems, directly incenting things that are very hard to incent, like early, pre-profitable energy innovation, conversion of fossil fuel plants, demonopolization of power sectors, conservation and reforestation, free trade, open markets, and competition.

The need to tailor these equity-side CTC mechanisms also presents a minor drawback. CTC CPI really needs to be tailored to each sector, given differences in metrics of sustainability and regulatory environments. That's not a problem for industry-specific state or national legislation. But for economy-wide, multi-sector legislation, or perhaps even an international framework, it would cause complications. Fortunately, the CTC working groups came up with a far more broadly applicable CTC solution, as we shall discuss below.

Before turning from industry-specific to economy-wide CTC mechanisms, let's pause to consider how CTC-CPI – really the most basic form of CTC – compares to other kinds of incentives: conventional supply-side tax cuts, and conventional subsidies.

CTCs vs. Conventional Supply-Side Tax Cuts

CTCs were conceived from the start as a form of supply-side tax cut. Both propose marginal tax rate cuts on business and investment returns. Both have the same intention: to incent more work, investment, and mass participation in beneficial activity, for the purpose of making those benefits better, cheaper, and available for all, while also increasing prosperity for all. Both follow the principle of 'if you want more of something, tax it less.' Marginal tax rate cuts offer the most participatory kind of tax benefit, easiest for any taxpayer to use and benefit from, and are far simpler than other tax benefits, like deductions, credits, tradable tax equity, expensing, depreciation, etc.

CTCs Level the Playing Field

The key difference is that conventional supply-side tax cuts, broadly applied, take no notice of even large negative externalities caused by certain taxpayers receiving the tax cut benefit. By benefiting polluters, conventional supply-side tax cuts risk increasing pollution, as corporations ramp up production and output. They also create an uneven playing field, because the polluters have an advantage of not paying for the damage they create, but pass that cost on to other taxpayers - which is especially unfair for the non-polluters who cause no harm.

CTCs level the playing field with respect to negative externalities, by removing some of the unfair tax burden from the non-polluters. Moreover, as we shall see, certain CTC designs can be broadly applied economy-wide.

CTCs Reduce Distortion

CTCs are consistent with distortion-reducing tax preferences. While economists are often skeptical of tax preferences, they do support a few that are justified by reducing economic distortions and expanding GDP. For example, lower capital gains and business income tax rates are justified on the grounds that investment taxes are more distortionary, and depress GDP more than other taxes.

All factors considered, CTCs reduce distortion far more, and level the playing field better, than conventional supply-side tax cuts. Not only do CTCs reduce the same distortionary harm of investment taxes, they can reduce the distortionary taxes even more because of the political palatability driven by intense public concern for mitigating climate and environmental damage. Moreover, they go on to reduce the distortion of negative externalities, the distortion of big government programmes, and also, as we shall see below, the distortion of anti-competitive markets. CTCs are by no means meant to replace conventional supply-side tax cuts, but to enhance them, increasing both prosperity and environmental beneft. CTCs can accelerate the transition to a net zero-emission economy by lowering tax rates for clean free enterprise, to provide a pain-free means of turning capitalism into clean capitalism.

CTCs vs Conventional Tax Credit Subsidies

In the US, tax credit subsidies, like the Investment Tax Credit (ITC) for wind and solar, dominate clean energy incentive policy. They have helped unprofitable clean technologies to scale up, drive down costs, and transition to unsubsidised profitability. Historically, the ITC gave developers a tax credit worth 30% of project costs. The developer could use that credit to reduce other investment taxes owed, or trade it to another taxpayer with a large tax bill, hiring bankers and lawyers who specialize in tax equity trading.

Tax Credits Constrict Markets to the Super Rich and Waste Money on Middlemen

Unfortunately, making the unprofitable viable creates hideously complex transactions. These are difficult for small entrepreneurs and investors to use. Only the very highest income taxpayers, the Berkshire Hathaways of the world, have the massive income to fully offset all the credits thrown off by a big utility scale project. All other developers and investors must

hand over a large slice of subsidy to extremely expensive tax equity traders, and must themselves be big enough to afford a back office dedicated to managing this artificial market, a huge distraction from their core business.

Ironically, US subsidy arrangements for wind and solar exclude potential participants and other clean technologies, while wasting dollars on middlemen. The result is an extremely constricted, non-inclusive market, dominated in solar by perhaps 15 really large firms, seven or eight of which are banks. It remains very hard for smaller investors and developers to participate in this market.

Robbing Peter to Pay Paul Gets Complicated

The root dysfunction here is that most conventional subsidies 'rob Peter to pay Paul,' where Paul is often the operator of a money-losing venture that would not survive without the subsidy. This means conventional subsidies often promote failure, reduce GDP, and potentially lead to subsidy dependency, and even dangerous economic bubbles. We saw this in Spain in 2008 – 2013, when over-subsidisation of the then-unprofitable solar industry collided with the global financial meltdown, driving unemployment over 20% for more than five years, up to 27% at the worst point.

Easier for Everyone: Not Robbing Paul

By contrast, CTCs, like any supply-side tax cut, don't 'Rob Peter to pay Paul' but rather refrain from robbing Paul of his profits. That's an easy-to-use benefit that gives everyone, large and small, the opportunity to participate with higher proft. CTCs won't promote failure, because tax rate cuts don't benefit the unprofitable. And they are not wasted on middlemen, or reserved for the super rich. Rather they promote competition, participation and equal opportunity, and actually benefit the most successful low-cost innovators the most. This is a sharp contrast to conventional subsidies, where the best clean technology companies are held back, forced to lose customers, revenue, and market share to less efficient, subsidized money-losers who waste market resources.

Predictably, the shift to CTC would vastly expand the number of small to medium sized investors and developers able to compete in the market, and increase the tax benefit going to actual deployment, without increasing tax expense.

Tech Neutrality: Pick Metrics, Not Winners or Losers

Entirely tech-neutral, CTC-CPI rewards profit earned while achieving an objective metric, such as low-or-zero emissions for transportation, energy, buildings or products, without dictating what technologies must be used to get there. Conventional tax credit subsidies like the ITC are neither techneutral, nor do they reward commercial success outright. The ITC picks specific technologies (often wind and solar) as winners, whilst excluding many clean technologies that might be more competitive today if it weren't for decades of subsidy discrimination.

It is important to note however, that picking specific technologies does have an important benefit for incentive policy: the legislature can know the incentive goes towards

solutions with proven metrics of impact. The ITC could easily be more comprehensively tech-neutral. The pro-solar-&-wind discrimination of the ITC may be an artifact of the high expense and economic drag of conventional tax credit subsidies, which drives Congress to limit subsidized technologies to reduce tax expense and economic harm. A more cost-effective incentive, that actually contributes to GDP, might allow Congress to apply that incentive more broadly to every major metrics-based clean technology, economy-wide, more like an ordinary, broad based supply-side tax cut. All the above applies to consideration of the next level of CTC design, a new, easy-to-use, leveraged supply-side incentive that levers open markets to expand participation, innovation, and competition economy-wide, even worldwide, as broadly and cost-effectively as possible.

Clean Asset Bonds & Loans and The Clean Free Market Act

The **Clean Free Market Act** (CFMA) proposes a rapidly scalable CTC strategy – a simple plug and-play bill that any state or nation could implement to spark the creation of a powerful, national, or even global clean free market, defined by low taxes, no tariffs, and no barriers to participation in clean free enterprise.

Clean Asset Bonds & Loans (CABLs) provide the basic building block for this market: tax exempt private debt. CABLs allow private projects deploying qualifying pollution reducing technologies to acquire tax-free debt. Tax-free interest would reduce the interest rate by about 30 percent, a beneft that would be easy to use economy-wide, because debt provides a critical, natural tool of capitalist finance, commonly used in every economic sector, by investors large and small.

Supply-Side Leverage

CABLs apply policy leverage (a clean tax cut) to financial leverage (private debt) to create a new kind of leveraged incentive that simultaneously drives down costs of capital and costs of clean energy and products, and also drives up return on equity. This improves on existing tax-exempt bonds, which are uniformly government bonds: on the other side of such debt is government – so no useful leverage effect.

By contrast, CABLs, by leveraging up equity returns, attract all kinds of investors, large and small, to both tax-exempt debt and taxable equity. This makes CABLs far more participatory than either tax credits or municipal bonds, which only benefit, and constrict markets, to high income investors. Easier to use and more broadly attractive than tax equity, CABLs allow low cost innovators to expand faster.

CABLs for Participation, Innovation, Competition & Open Markets

Indeed, since CABLs incent entrepreneurial private developers and investors of every size, they will tend to push power markets in the direction of more competition, and build a powerful constituency for opening markets. That increased competition throughout bigger, open markets will drive innovation. Larger open markets act as a bigger incentive for new innovation. The bigger the potential market, the more profitable innovation looks as a potential investment.

CABL Leverage: More Tax Revenue, More Cost-Effective Impact, Less Waste

Leverage also makes CABLs far more cost-effective than conventional subsidies. They give up tax revenue where returns are low (the average yield on non-government debt in the U.S. is 3.67%) but harvest it where returns are high (the average return on equity is 13.63%).19 20 If we assume those returns for a new business, financed with 50 percent CABLs, 50 percent taxable equity, then the government would take in 370% more tax revenue on equity profits than they forgo on the tax-exempt debt.21 CABLs, by reducing conventional subsidy waste, offer an easier-to-use, better-value deal to developers, without increasing tax expense for governments.

CFMA for Global Markets: Internationally Tax-Exempt CABLs

If applied internationally, with tax-exempt reciprocity between nations, CABLs start to look like the aforementioned Holy Grail of climate policy: a simple means to mobilize trillions of dollars in global capital flows for all the clean infrastructure needed to avoid the worst impacts of global warming – along with a host of other environmental challenges.

Any state or nation could adopt the CFMA as a bill or international agreement. If several join the CMA as a reciprocal framework, CABLs could then finance projects in any participating nation with tax-advantaged returns to investors in every participating nation. Clean assets and products would also trade between cooperating nations without tariffs.

The immediate advantages of adopting the CFMA, and so joining this new global clean free market, should be obvious to neighboring countries: the potential to attract vast international capital flows for sustainable debt and equity investment, the latter taxable. The CFMA provides a powerful carrot – and strategy – to encourage nations of the world to open up their economies, in order to let in the vast capital flows of the clean free market.

CABLs would provide a better kind of 'climate justice': a mechanism for global-scale economic liberation and capital mobilization, with sustainable investment flowing between the peoples of all participating nations, rich and poor, large or small. While government-to-government foreign aid transfers serve only to prop up corrupt dictators and kleptocrat cronies who deny their peoples economic freedom and opportunity, CABLs cut out the corrupt middlemen, and allow investment to flow from free people, to free people.

Clean Open Market InterNational Commitments

As part of clean free market policy, Clean Open Market InterNational Commitments (COMIN Commitments) could constitute an international alternative to the traditional NDC commitments of UN treaties (see chapter 7). For COMIN Commitments, national contributions would be largely achieved by nations committing to cooperate to open markets and remove all tax, trade, and bureaucratic barriers to climate solutions. Nations would commit to maximizing a freedom-expanding approach using any of the consensus strategies suggested in this chapter and book: energy competition, clean free trade, the CFMA, CABLs, CTCs, localism, and more.

Free Markets First

COMIN Commitments would be a group commitment to reach Paris-consistent National Determined Contributions (NDC) targets by 2050, by leading with and maximizing collaborative clean free market policies first. Intermediate targets would help evaluate if nations are on target. Even if more needs to be done at that point, expanding free markets will (a) expand prosperity first, so more resources are available to pay for policy fixes if

needed later to fill in any policy gaps, if nations fall short on intermediate targets; and (b) allow the currently obstructed substitution effect of more economically punitive and inflationary market-based policies (if needed later) to function more efficiently. Price signals will work much better once markets have been opened and innovation has advanced, and barriers to technology transition have been lowered. This approach would make a great deal of sense to many nations struggling to raise their populations out of poverty. Climate solutions that expand prosperity and freedom, and come with international investment, would be a welcome option. People would sign up for a commitment like that.

Up next, let's explore how CTC targetability will allow policy innovators to generate proposals that dovetail with the CFMA and COMIN Commitments, but even more directly incent difcult, high-value goals like early-stage innovation, entrepreneurship, competition, fossil fuel plant conversions, forest and natural resource conservation, and more.

The 'First-Five' Proposal for Early-Stage Energy Innovation

While CABLs would directly incent innovation in established profitable clean technologies, they cannot directly incent pre-profitable innovation, largely because pre-profitable innovation rarely uses debt financing. So policies that directly incent pre-profitable innovation would be a wonderful complement to CABLs and the CFMA.

While tax rate cuts generally do not benefit unprofitable business models, they can be used to incent pre-profitable innovation if targeted at the transition to profitability. Here is an intriguing proposal that targets one of the more difficult kinds of entrepreneurship: early stage energy innovation.

Energy innovation is essential but hard. Clean energy adoption is held back because of technical constraints. For renewables, intermittency leads to lack of dispatchability and reliability. For nuclear, security risks, safety concerns and project size drive opposition, delays, and cost overruns. Meanwhile, technologies for carbon capture, grid-scale storage solutions, fossil fuel plant conversion, zero-emission waste-to-energy and alternative fuels all have advocates, but few have yet achieved profitability or widespread adoption. Moreover, energy is currently very cheap, while frst-of-a-kind plants are generally expensive, costing much more than incumbent technologies with their economies of scale. It is tough to make the numbers work until similar economies of scale emerge for each such clean alternative. We therefore need breakthrough energy innovation to overcome these limitations, accelerate clean energy adoption, and avoid the worst risks from climate change.

One well-understood bottleneck for clean energy innovation is that the first five commercial scale plants for a new advanced energy technology are almost impossible to finance. Venture capitalists demand proof that the technology can work at commercial scale – but the only acceptable proof is, ironically, a handful of profitable plants up and running. Investor reluctance stretches out a self-reinforcing 'valley of death' for these projects: the time between startup and profitability is daunting. It is likely that a large number of technically feasible innovative technologies are stuck in this bottleneck right now.

Shrink the Valley of Death

The First-Five CTC proposal offers a possible way to shrink the so-called 'valley of death': improving the risk/reward ratio. This might be done by increasing the back-end reward, by granting tax-exemption on all business and investor income from the first five commercial-scale plants deploying a new, better, zero emission technology (or add-on

improvements, such as new storage or carbon capture) for a period of years, say 15, after the first profitable year.

First-Five CTC would significantly raise the profitability of these first five plants, making them easier to finance, and so shrink the valley of death. If the first five are successful, commercially and in terms of improved reliability and certified net emission reduction, then the valley of death has been conquered, and commercial-scale deployment of the new technology can move forward, being best accelerated by use of CABLs from that point on.

Conversion CTCs for Fossil Fuel Plant Conversions

Something like First-Five CTCs could help tackle one of the greatest barriers to de-carbonisation: the sunk costs in existing fossil fuel plants. Utilities owning such plants face not only loss of a stream of profits, but also large decommissioning costs – altogether a daunting disincentive to any clean energy transition. The same is true for industrial plants using fossil fuels for production.

But what if such plants could be profitably converted to run on clean or renewable fuels, like hydrogen, or waste biomass, or solar thermal? Or if future carbon capture retrofits, or electrochemical conversion technology adaptations, could make such plants much closer to zero-emissions? Such technologies might offer double-barrel benefits: direct conversion of a baseload plant from high to low emission power, and a profitable zero-emission path forward for fossil fuel plant owners, that does not result in layoffs and large financial losses.

This would provide a new option that fossil fuel plant owners and workers would all cheer for. Especially if extra years, and revenues, could be added to the life of an asset. Converting such traditional opponents of climate action to new champions for climate action gives these kinds of projects an especially high value. To further incentivise this transition, the CTC benefits for fossil fuel plant conversions should be generous.

CABLs could further finance these conversions. First-Five CTCs could also apply to the first five of any new kind of new zero-emission plant conversion, making profits from such experimental conversions tax-exempt for 15 years or so.

CTCs for Conservation

A lot has been said about the need for climate policy to reduce greenhouse gasses by incentivising clean and renewable energy technologies to emerge. Yet, it is also important to not ignore the more direct concern for preserving ecosystems and wildlife. In fact, the most successful environmental policy precedent for the basic CTC concept ('if you want more of something, tax it less') is the conservation easement tax deduction. Since its US introduction in 1976, the use of charitable conservation easements has exploded, with over 56 million acres conserved as of 2015. American forests have rebounded in tandem, with 19 million acres of new forest added between 1990 and 2010. That is a lot of carbon sequestration, making the conservation easement tax deduction an outstanding accidental US climate policy.

Concepts such as CTCs and CABLs could easily be applied to further this on a global level, allowing for cross-national cooperation on rainforest conservation, as an example. Buying tracts of rainforest for conservation purposes, with the concomitant carbon sequestration benefits, could be financed by internationally tax-exempt CABLs, whilst profit from sustainable activities (such as eco-tourism or silviculture) should be subject to CTCs. Conservation easement tax deductions might even be designed with international reciprocity, where a German individual or business could finance the preservation of land in, say, the

Congo, whilst receiving tax deductions for that in Germany. Nevertheless, all this must go hand in hand with clearly defined property rights, as has been emphasized throughout this book. A variety of CTC mechanisms could provide powerful conservation solutions, but only if tied to a framework of land tenure property rights and land title clarification, and reinvigoration of the rule of law. Further, many of these sustainable land-use solutions will require the development of certification systems that allow the identification of properties and products to which CTCs or market-based incentives can be awarded. Yet, despite the obstacles, the direction our environmental policy should be heading in is clear.

The US example of conservation tax deductions empirically shows that CTC concepts have worked in the past. By implementing similar policies as presented here, governments and international organizations can make headway in environmental policy, by using the right combination of universal economic rights and incentives for good stewardship.

Clean Free Trade for Environmental Betterment

Climate change, as a global problem, requires globally applicable solutions. Trade policy presents a few options worth considering.

Conventional free trade offers an obvious advantage: it lifts millions out of poverty and gives them the means to improve their lives. But since it takes no notice of negative externalities, it also promotes polluters and gives them a free ride for the cost of damages imposed on nations, near and far.

Nonetheless, with free trade being one of the most powerful connections between countries and continents, harnessing this interconnectedness is vital to tackling the truly global aspects of climate change. Through such voluntary cooperation between people and companies across borders, new ideas and new businesses can more easily spring forth and find a global market. As explained in chapter 5, given different regional advantages, free trade means more can be produced with less resources, thus resulting in both more sustainable production processes, and more prosperity for all.

Unfortunately, despite these well-understood advantages, free trade remains very hard to achieve or maintain, being under constant assault by special interests seeking political protection. Can we make free trade better for the environment, and also easier to achieve?

Clean free trade (CFT) – the removal of tariff and trade barriers on environmentally beneficial goods and services – may prove easier to achieve than conventional free trade, by riding the growing public pressure for environmental solutions. It may also help persuade a large environmental constituency that free trade in general, within a clean free market framework, offers the essential macro-conditions to scale and speed innovation of climate solutions, some unforeseen by today's experts. Clean free trade itself would allow greater deployment led innovation, and greater market rewards and acceleration for successful eco-innovators.

CFT, at its essence, is crucial in bringing forth more innovations and cleaner technologies on a global scale, and would be a useful component of any strategy to make trade, in general, more popular and politically feasible.

The Agreement on Climate Change, Trade and Sustainability (ACCTS)

While all of the international proposals discussed so far in this book have clean free trade elements inherent to them, none takes that on quite so comprehensively as the Agreement on Climate Change, Trade and Sustainability (ACCTS), which was announced in 2019 by

the governments of New Zealand, Iceland, Fiji, Costa Rica, and Norway. The initiative revolves around three core policy proposals:

The first is the removal of tariffs on environmental goods and services. This builds on the agreed upon definition by the Organisation for Economic Co-operation and Development and Eurostat: "activities which produce goods and services to measure, prevent, limit, minimize or correct environmental damage to water, air and soil, as well as problems related to waste, noise and eco-systems." In practice, these goods include parts for solar panels, wind turbines, air quality monitors, and the like - as well as the technological innovation that makes them all possible.

Second, ACCTS aims to establish concrete commitments to eliminate fossil fuel subsidies. The fossil fuel industry received global subsidies in excess of \$4.9 trillion in 2015, distorting energy costs. Experts say that the abolition of these would have reduced global carbon emissions by 20%, deaths by fossil fuel air pollution by over half, and saved revenue equivalent to 4% of global GDP.

The third core goal is the development of voluntary guidelines for eco-labelling programmes and mechanisms. These are intended to provide consumers with more information about the environmental cost of products through a universal set of standards. Standards also provide a framework essential to any incentive policy like CTC. We can only incent the supply and demand of eco-beneficial products and services if we can reliably identify them. With consumers on board, providing such information will reward more environmentally friendly businesses, while incentivising others to follow suit.

Ultimately, trying to model after ACCTS and working towards more clean free trade agreements with other countries should be a cornerstone of any nation's environmental policy. On the international level, commitments by the World Trade Organisation (WTO) to eliminate environmental trade barriers has to continue with the highest priority to achieve full and global clean free trade within the near future.

Conclusion

This non-exhaustive list of clean free market policy recommendations has, at its heart, a commitment to expanding freedom for beneficial activities. ACCTS, CFMA, COMIN Commitments, and the Declaration on Energy Choice & Competition all propose a range of new national and international strategies to break open markets to greater competition, innovation, participation, and access to clean products, energy, and services. Policy innovators should consider how the strongest elements of each might be combined in both national and international frameworks. Can clean free trade agreements encompass an agreement to open energy markets to national and international competition, even trading power across cheaper, cleaner, more reliable transnational grids? Can a new generation of supply-side incentives, like CABLs and other clean tax cuts, provide an international carrot for freedom, a lever to open markets, unleash capital flows, and lift billions into sustainable prosperity? Policy innovation must now catch up to technology innovation, if we hope to turn capitalism into clean capitalism.