DISCUSSION PAPER

Fiscal Instruments in INDCs: How countries are looking to fiscal policies to support INDC implementation

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Introduction

Countries are increasingly turning to the use of fiscal instruments to support low-carbon development and efforts to reduce emissions. This is evidenced in the proliferation of the references to these instruments within the Intended Nationally Determined Contributions (INDCs) that were submitted and examined in advance of COP 21. With that in mind, the International Institute for Sustainable Development (IISD) and the German Agency for International Cooperation (GIZ) (on behalf of the German Ministry for Economic Cooperation and Development) have undertaken a rapid review of INDCs to highlight the countries that are using these tools as part of their INDCs, catalogue the different tools that countries are referencing in their INDCs, identify the frequency of their use and identify trends in how countries are planning to use fiscal instruments to support achievement of INDCs.

Based on this analysis, this rapid review also intends to recommend resources that are available to countries that have committed to fiscal instruments, in order to support implementation. These recommendations include GIZ tools that support fuel price information and reform, IISD-Global Subsidies Initiative (GSI) models to estimate the impacts of fiscal reforms and provide supportive information to policy-makers and general GIZ advisory services regarding the design and implementation of fiscal instruments.

For countries that have not yet indicated that fiscal reforms will be part of their INDC implementation, but may have an interest in exploring this area, this rapid review can serve as a starting point by indicating how other countries are approaching this issue and offering insight into ways that fiscal policy can support INDC implementation while opening fiscal space for countries.

What Are We Looking For?

IISD reviewed all of the INDCs submitted to the United Nations Framework Convention on Climate Change (UNFCCC) as of November 20, 2015, with the goal of identifying the fiscal policies and economic instruments that reference energy subsidy removal, energy tariff changes, energy taxation and carbon pricing as part of the contribution efforts countries have identified to implement their INDCs.

The review also encapsulated broader language, including economic instruments, framework conditions, reform and economic conditions related to energy. The review sought as much as possible to focus on either discreet future commitments or highlight where efforts on fiscal reform were already underway and are intended to support continued efforts to meet INDC outcomes.

The review focused on key elements of the INDCs, organized in a table that would highlight the following elements:

- Country: Name
- Reference: Can the reference be characterized as a fossil fuel subsidy reform (FFSR), a clean energy subsidy or a form of carbon pricing, which were the three main instruments identified in INDCs?
- Description: What is the language within the INDC that outlines the use of fiscal instruments?
- Conditionality: Is this fiscal reform something that the country is doing unconditionally, or is the reform conditional on the UNFCCC negotiations, financing or some other element?
- Timing: Is the reform in place now, or, if not, when will it be enacted?
- Implication: Is there an indication of the greenhouse gas (GHG) reduction expected from the reform, either within the INDC, or from independent analysis, such as by using the Global Subsidies Initiative – Integrated Fiscal (GSI-IF) model?

While we understand that countries may be taking on fiscal reforms other than those within the INDCs, a review of INDCs provides a starting point and a level playing field for comparison. INDCs also represent the international, public contribution that countries are putting forth as their priority in combatting climate change. With additional time and analysis, this review could be expanded into national policy documents as well.

What We Found

The full results of the review are included in Annex I. As a result of the review, some trends emerged that help inform how fiscal instruments are being used to support INDC implementation.

- **The use of fiscal instruments is a common INDC component.** This review identified 39 INDCs (including the EU INDC, which covers 28 member states) that include a reference to the use of fiscal instruments as a means of INDC implementation. Some INDCs referred to more than one instrument, leading to 25 references for clean energy subsidies, 13 references to FFSR and 13 references to carbon pricing. Interestingly, in eight cases, an INDC included both references to clean energy subsidies and FFSR, indicating that a wholesale reform of financial flows in favour of clean energy was desired. Two INDCs referenced the use of all three instruments.
- **Both developed and developing countries see value in fiscal instruments.** Of the 39 INDCs included, only five come from countries that fall under the Kyoto Annex I group of countries. Using this as a basis for determining developed countries and taking into account that the EU emissions trading system (ETS) covers 28 member states, this means that 33 developed countries and 34 developing countries have references to fiscal instruments. This clearly indicates that the use of fiscal instruments is something that countries of various development levels all feel can contribute to their INDCs. Within this breakdown, while carbon-pricing mechanisms were more likely to occur in developed countries, the use of subsidy reform (FFSR and clean energy subsidies) was more evenly distributed.
- **Not many countries have attached GHG implications to their fiscal reform measures.** There are likely many reasons for this, but the review found only a couple of references to quantified GHG reduction implications. For some countries, this may indicate a desire to articulate GHG implications at a later date; for others, the implications of fiscal instruments for GHGs may be reported through alternate means.[1]

[1] While this rapid review did not allow the time to go through national documents for GHG implications of fiscal policies, as a stand-in, for those countries where data were available, we have indicated the potential GHG implications through the use of the GSI-IF model. The GSI-IF model was developed by IISD and represents an unofficial estimate of the impact that FFSR efforts will have in reducing countries' emissions. This estimation should be taken as an independent third-party estimation and, while useful, does not represent any official state for the government indicated. For countries where an estimation of GHG impact of fiscal reform has not yet been undertaken, the use of the GSI-IF model can be a way for countries to have an early estimate of the impact that their fiscal policies may have on their contribution to reduce emissions. The GSI-IF model, as it is applied equally across countries, can also provide a way for countries to compare their efforts to other countries, either as part of the policy development process (for those who do not currently indicate FFSR in their INDCs) or as part of the process of communicating the impacts of their policies.

- **FFSR is a common tool and can lead to significant GHG reductions.** As mentioned, the rapid review found 13 references to FFSR within the INDC review (see Table 1). There are also likely several other countries considering this reform despite not including a reference to FFSR in their INDCs. As an example, there are several G20 countries (e.g., Canada) that have committed to FFSR as part of the G20 commitment, but have not included it in their INDC. The point is that FFSR is mentioned in a number of countries as a fundamental tool that can be used not only for its benefits for generating economic space for countries, but also for its implications for GHG mitigation. Using INDC references, as well as the GSI-IF model, the rapid review also found that FFSR can have a significant impact on emissions. The GSI-IF figures find that, for two of the countries that have committed to FFSR as part of their INDC, the impact of this measure alone can be a reduction of over 14 per cent from their business-as-usual (BAU) baseline by 2020. GSI-IF has found even higher potential impacts of FFSR for countries that do not currently consider FFSR as part of their INDC. The GSI-IF model was applied to 20 countries[2] to understand the impact of the phase-out of consumer fossil fuel subsidies across 20 countries and found average national emissions reductions of 10.92 per cent compared to the BAU baseline. Emissions reductions would be increased further to 18.15 per cent if a modest amount of the savings from subsidy reform (30 per cent) were redirected toward renewables and energy efficiency. The cumulative savings from across the 20 countries by 2020 amounts to 2.8 gigatonnes (Gt) of carbon dioxide equivalent. Furthermore, the research found that this policy tool saved government resources: for every tonne of carbon dioxide equivalent removed through FFSR, governments save an average of USD 92.83.[3]

- **A majority of countries are committing to unconditional reforms.** Perhaps the most positive development of this review was finding that a majority of countries were committing to fiscal measures to support their INDC unconditionally. Nearly three quarters of commitments would seem to be unconditional based on our review of submissions.[4] This speaks to a few dynamics of fiscal instruments. First, they are generally domestic-led actions that do not require massive influxes of international finance to be taken (as opposed to, for example, major clean energy infrastructure projects). Second, it speaks to the confidence in the fiscal instruments that are available that they do not require international technical supports for many countries. Third, it also speaks to the benefits of these instruments that there are co-benefits to these instruments (in addition to their climate change considerations), such as increased financial space for governments or the reduction of local air pollution, that make them attractive.

[2] The GSI-IF model has been applied to the following 20 countries: Algeria, Bangladesh, China, Egypt, Ghana, India, Indonesia, Iran, Iraq, Morocco, Nigeria, Pakistan, Russia, Saudi Arabia, Sri Lanka, Tunisia, United Arab Emirates, the United States, Venezuela and Vietnam. Individual country results are available in the report.

[3] Merrill, L., Bassi, A. M., Bridle, R. & Christensen, L. T. (2015) *Tackling fossil fuel subsidies and climate change: Levelling the energy playing field.* Retrieved from http://norden.diva-portal.org/smash/record.jsf?pid=diva2%3A860647&dswid=8225

[4] As this was a rapid review of INDC submissions, researchers relied on the INDC submissions and did not contact countries directly. As a result, in cases where it was not completely clear whether a commitment was conditional or unconditional, the research team used its best judgement for determination based on the context of the reference in the INDC. A more in-depth review would allow for greater confirmation.

Table 1: Countries with FFSR in their INDCs and potential GHG implications

Country	Potential Impact on Emissions (GSI-IF) – Reduction from BAU (%)		
	2020	2025	2030
Burkina Faso	-	-	-
China (energy pricing reform)	0.78	0.69	-
Egypt	14.88	12.61	-
Ethiopia			
Ghana	2.83	2.45	-
India	3.20	2.73	-
Morocco	-	-	6.60
New Zealand	-	-	-
Senegal	-	-	-
Sierra Leone	-	-	-
Singapore	-	-	-
UAE	14.41	12.97	-
Vietnam	1.71	1.86	-

Recommendations

Based on the findings of the rapid review, the project team identifies the following recommendations for countries considering fiscal instruments as part of their INDCs, those that currently do not but may consider fiscal instruments as part of their future GHG mitigation efforts and the broader research community.

1. **Fiscal instruments should be considered as part of the foundation of energy policy and climate plans to reduce GHGs**. Given the co-benefits of fiscal policies, the impact they can have (as indicated in INDCs and the GSI-IF model) and the fact that over a quarter of INDCs already include them, more countries should strongly consider including fiscal instruments as part of their plans to reduce GHG emissions—not least because of the need for coherent fiscal, energy, transport and climate policy in terms of aligning fiscal measures with long-term climate goals. Furthermore, the significant number of countries already using these instruments, as indicated by the review, provides to countries a wide range of potential models to follow and international partners to learn from. On a related note, the initial assessment of INDCs found that current contributions are not yet sufficient to keep global GHG emissions below levels necessary to keep within the two-degree threshold. While it is significant that roughly 40 INDCs do include fiscal instruments as part of the INDC, this indicates that approximately 100 INDCs currently do not include fiscal instruments. The consideration and inclusion of fiscal instruments in as many of these remaining INDCs as possible would be a constructive way to close the two-degree gap.
2. **Countries can and should test the impact of fiscal instruments using tools that are available to provide estimates for policy impact and international comparison.** For those countries that have already conducted domestic estimates of policy impact, the use of tools for macroeconomic forecasting, such as the GSI-IF model, can provide independent estimates of impacts and support domestic information. GIZ and IISD both have experience in working with governments to identify and implement the adequate forecasting methodology for individual country and policy contexts. For countries considering the use of fiscal instruments, these tools can be used to support environmental fiscal reform in general as well as domestic fuel price information and reform in particular, while

providing test cases of what different reform tools can offer to countries in terms of both fiscal space generation and GHG mitigation.

3. **Both FFSR and energy and carbon taxation should be strongly considered as GHG mitigation tools for countries looking to meet INDC efforts on mitigation.** The review revealed that FFSR efforts are mainly unquantified in INDCs, but through GSI-IF modelling the review team has found that the effect of FFSR can be significant for some countries in terms of GHG mitigation. FFSR has other co-benefits, such as increased fiscal space, levelling the playing field for clean energy technologies and sustainable mobility, as well as other potential secondary benefits such as health benefits (air and water quality); therefore, we strongly recommend that countries consider the use of FFSR as a means to undertake GHG mitigation and overall fiscal reform.

Conclusion

This review, while undertaken as a preliminary high-level, exercise only, clearly indicates that fiscal instruments are playing a prominent role in INDCs. While not many of these INDC fiscal instruments are quantified, the use of the GSI-IF model to quantify the potential of FFSR indicates that the impact of these fiscal instruments on GHGs can be very significant for the countries using them to help meet their GHG mitigation contributions. While a significant portion of INDCs do include fiscal instruments, and this is a positive development for their international proliferation, the fact that nearly two thirds of INDCs still do not include fiscal instruments indicates room for growth in their usage. Countries that do not yet include fiscal instruments in INDCs can use tools already available to consider their potential impact, and then implement these instruments as part of the requirement to increase the level of effort of international GHG mitigation so that the two-degree threshold can be maintained. IISD-GSI and GIZ have numerous tools available to support these tasks and are happy to contribute to this necessary process.

GSI-IF model

The Global Subsidies Initiative – Integrated Fiscal Model (GSI-IF model) was developed by IISD's Global Subsidies Initiative with support from the Nordic Council of Ministers. GSI-IF analyzes the effects of either FFSR or the introduction of fossil fuels taxes (such as a value-added tax) on GHG emissions to support national-level reform planning and enable international reporting, particularly in light of planning INDCs, using the four-stage process below. The results have been shared with the policy-makers of many of the countries modelled.

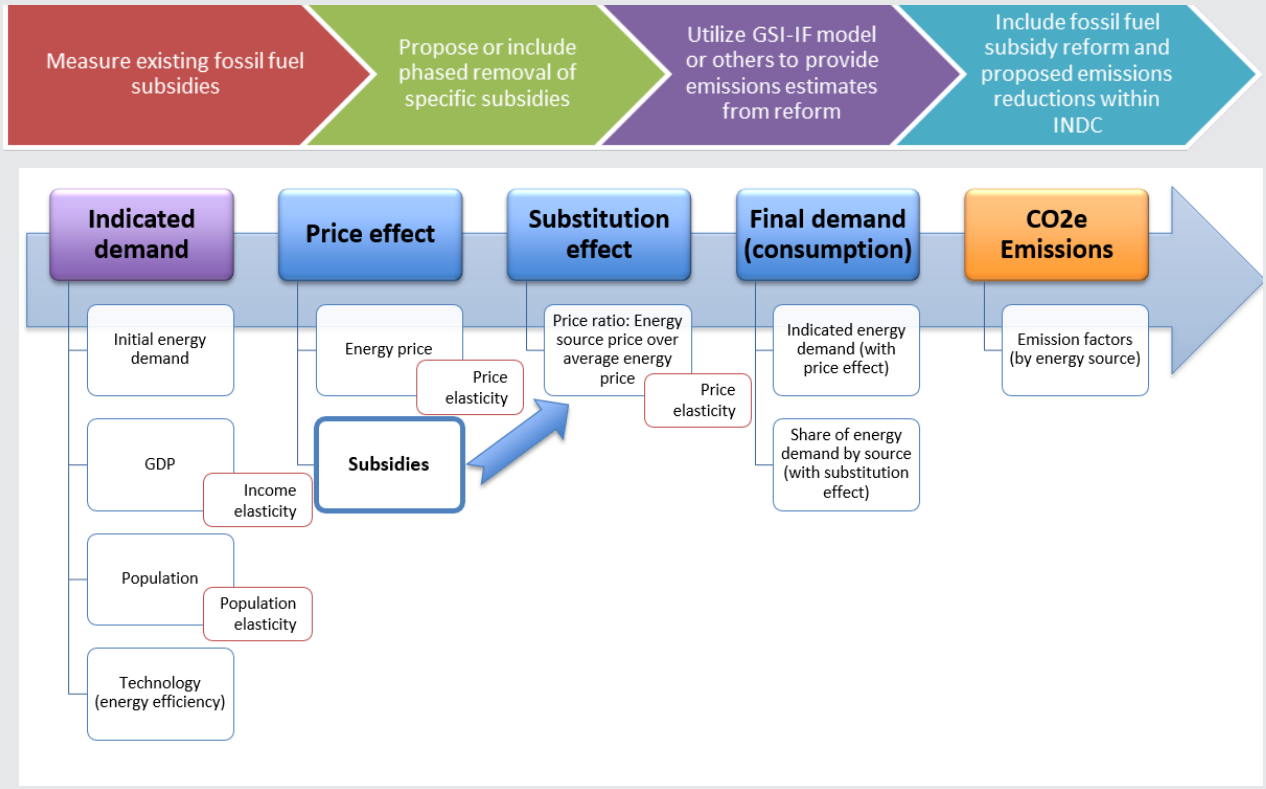


Figure 1: Process for including FFSR within INDCs and outline of GSI-IF model

This economic simulation model tracks energy demand at the national level by sector and source. The model uses social and economic drivers to determine future energy consumption and related GHG emissions. The GSI-IF model estimates energy consumption up to 2030 by sector and source using a baseline initial demand and adjusting it with elasticities associated with GDP, population and energy price changes. Various energy-efficiency scenarios can also be tested. Emissions factors are applied to determine total national emissions from the use of energy. GDP growth is currently based on the International Monetary Fund (IMF) Economic Outlook and population is based on the World Population Prospects database. Subsidy data were drawn from the International Energy Agency and the IMF. The prices of energy sources are based on medium- to long-term trends in fossil fuel prices and the impact of subsidies. Subsidy reform, which leads to higher prices for a particular source, causes a drop in consumption due to a price response and the substitution for consumption of other, cheaper fuels. The model includes energy consumption from the residential, commercial, and industrial and transport sectors, disaggregated into coal, petroleum products, natural gas, biofuels and waste, and electricity. The model includes data from country-level or international sources depending on availability. GHG emissions are affected by both the drop in demand and a change to the fuel mix. The GSI-IF model analyzes these effects separately, evaluating the impact of fossil fuel subsidy removal on GHG emissions.

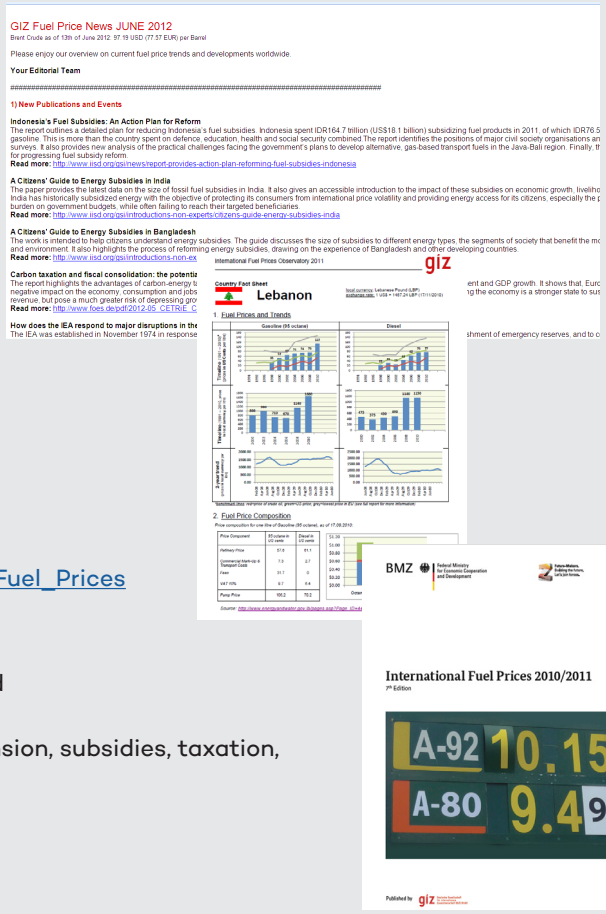
Source: Merrill, Bassi, Bridle & Lasse (2015)

GIZ's Work on Fiscal Instruments to Support Low-Carbon Development

International Fuel Prices

International Fuel Prices is a long-time effort of GIZ on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) to provide decision-makers with up-to-date data on fuel prices on a global scale. With its global network of projects in 135 countries, regional offices and representation in 64 developing countries, GIZ has published a biennial study, *International Fuel Prices*, on the global fuel sector since 1999. The study enables policy-makers to better understand fuel price trends, estimate subsidies and set correct taxes on transport fuels. Comprehensive data on fuel is provided worldwide, thus making a valuable contribution to debates on energy, climate and transport. Decision-makers benefit from access to essential information on pricing, potential income from fuel taxes and reform processes that have been carried out in other countries. The International Fuel Prices report provides an overview of the retail prices of gasoline and diesel in over 170 countries. It also explores recent trends and case studies on fuel prices and fuel pricing policies in developing countries.

For more information, see: www.giz.de/fuelprices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Environmental Fiscal Reform

A fundamental objective for the realization of low-carbon development is to ensure that the prices of goods reflect the actual economic, environmental and social cost of their production and use. Environmental Fiscal Reform (EFR) helps to correct underlying market failures through the elimination of environmentally harmful subsidies and the use of environmental taxes and charges. On behalf of BMZ, GIZ supports partner countries in the preparation, implementation and monitoring of such reforms.

GIZ services to support EFR include:

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- **Capacity development**: GIZ offers a training seminar on strengthening the capacity to prepare and design an EFR-process.

For more information, see: www.giz.de/rioplus

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This interactive training seminar for policy-makers, administration officials and relevant stakeholders conveys in-depth knowledge of EFR approaches in various sectors and strengthens capacities to prepare and design EFR strategies.

Flyer: https://www.giz.de/fachexpertise/downloads/Fachexpertise/giz2013-en-rioplus-training-environmental-finance-reform.pdf

Country cases
An overview of a number of developing and emerging economies that have experience with EFR can be found here: https://www.giz.de/fachexpertise/downloads/giz2014-en-environmental-fiscal-reform-case-studies.pdf

More information: www.greenfiscalpolicy.org
Contact: Eike Meyer, eike.meyer@giz.de

Annex 1: Summary of INDC Rapid Review: References to Fiscal Mechanisms in INDCs[1]

Country	Reference	Description and language	Implication e.g. emissions reduction figure if available and ref.
Australia	Clean Energy Subsidy	Australia's Emissions Reduction Fund supports Australian businesses to reduce emissions while improving productivity. The first auction under the fund was held in April 2015, and successfully purchased over 47 million tonnes of abatement at an average price of AUD 13.95.	Not available
Burkina Faso	Clean Energy Subsidy, FFSR	Clearly promote renewable energy, at least by eliminating fossil fuel subsidies and, at best, by subsidizing investments in renewable energy. Promote architectural structures that use materials that are local, renewable and insulating and have a low energy cost for all public construction and, through subsidies and tax breaks, for private residences.	Not available
Cameroon	Clean Energy Subsidy	Mettre en place un cadre incitatif pour le développement des EnR (appel d'offre, tarifs de rachat, etc.) et lever les barrières à l'investissement (renforcement du cadre institutionnel, etc.)	Not available
Chile	Carbon Price	Impuesto a las emisiones de CO_2 aprobado por la Reforma Tributaria, Ley 20.780 de octubre de 2014, que entrará en vigencia a contar del primero de enero de 2017. & El impuesto será equivalente a 5 dólares de Estados Unidos de Norteamérica por cada tonelada emitida de CO2.	Not Available
China	Carbon Price, Clean Energy Subsidy, FFSR	To build on carbon emission trading pilots, steadily implementing a nationwide carbon emission trading system and gradually establishing the carbon emission trading mechanism so as to make the market play a decisive role in resource allocation and implement preferential taxation policies for promoting the development of new energy and to improve mechanisms of pricing, grid access and procurement mechanisms for solar, wind and hydropower. To advance the reform in the pricing and taxation regime for energy- and resource-based products.	FFSR can deliver -0.78% by 2020 and -0.69% by 2025 (GSI-IF)
Costa Rica	Carbon Price	New options for compensation should be also made available through the Domestic Carbon Market of Costa Rica, which is in a pre-operation stage, by designing regulations, procedures and protocols.	Not available
Côte d'Ivoire	Clean Energy Subsidy	Mettre en place un cadre incitatif pour le développement des énergies renouvelables (appel d'offre, FIT, défiscalisation, ...)	Not available
Dominica	Clean Energy Subsidy	This energy-efficiency program will be country wide, and will include the manufacturing, commercial and institutional sectors. Market-based mechanisms are to be introduced to enhance the uptake of these programs.	Forecasted Emissions Reduction: 5.2 Gg (INDC)
Egypt	FFSR, Carbon price	Reform energy subsidies. This policy is implemented using four pillars, namely: set different prices for petroleum products based on energy generation efficiency; increase the efficiency of energy use; provide support to certain sectors to promote switching from conventional energy sources to clean energy sources; and apply the fuel subsidy smartcard system to ensure that subsidies are received by target beneficiaries. A national market for carbon trading may be established. This national market may further be developed into a regional market, which can attract foreign direct investment in national carbon credit transactions, especially in the Arab and African region.	FFSR can deliver -14.88% below BAU by 2020, -12.61% below BAU by 2025 (GSI-IF)
Ethiopia	FFSR	Ethiopia has already removed fossil fuel subsidies to enable enhanced generation and the use of clean and renewable energy.	Not available

[1] Descriptions in this appendix have been taken directly from the countries' INDCs, with some minor editing for clarity.

Country	Reference	Description and language	Implication e.g. emissions reduction figure if available and ref.
European Union	Carbon Price	Legislative proposals to implement the 2030 climate and energy framework, both in the emissions trading sector and in the non-traded sector, to be submitted by the European Commission to the Council and European Parliament in 2015–2016	Not available
Ghana	FFSR, Clean Energy Subsidies	Set up feed-in-tariff for renewable energy technologies. Established a national renewable energy fund. Design renewable energy purchase obligation. Phasing out fossil fuel subsidies.	FFSR could deliver -2.83% below BAU by 2020 and -2.45% below BAU in 2025 (GSI-IF)
Grenada	Clean Energy Subsidy	Tax reduction incentive for use of solar panels and solar water heaters, installation of more energy-efficient light bulbs in some government buildings.	50% reduction of projected BAU by 2025 (INDC)
Guatemala	Clean Energy Subsidy	Además, se impulsara una normativa para establecer un programa de incentivos fiscales y subsidios enfocados en el uso de energías limpias para el transporte público y privado	Not available
Guyana	Clean Energy Subsidy	Legislation has been amended to remove import duty and tax barriers for the importation of renewable energy equipment, compact fluorescent lamps and LED lamps to incentivize and motivate energy-efficient behaviour.	Not available
Haiti	Clean Energy Subsidy	Adoption de mesures d'incitations fiscales favorisant les énergies renouvelables, la production locale notamment la bio économie.	Not available
Iceland	Carbon Price	Iceland will continue to be part of the EU ETS after 2020 due to its commitments under the Agreement on the European Economic Area.	Not available
India	Clean Energy Subsidy, Carbon Price, FFSR	To build capacities, create domestic framework and international architecture for quick diffusion of cutting-edge climate technology in India and for joint collaborative R&D for such future technologies. Perform, Achieve and Trade (PAT), as a market-based energy-efficiency trading mechanism. Cess on coal: India imposed a cess on coal in 2010 @ INR 50 (USD 0.8) per tonne of coal. Recently it has been quadrupled to INR 200 (USD 3.2) per tonne of coal. The coal cess translates into a carbon tax equivalent, using the emission factor for coal, of around USD 2 per tonne. This forms the corpus for the National Clean Environment Fund, used for financing clean energy, technologies and projects related to it. India has cut subsidies and increased taxes on fossil fuels (petrol and diesel), turning a carbon subsidy regime into one of carbon taxation. Further, in its effort to rationalize and target subsidies, India has launched the Direct Benefit Transfer Scheme for cooking gas, where subsidies will be transferred directly into the bank accounts of the targeted beneficiaries. In fact, over the past year, India has almost cut its petroleum subsidy by about 26 per cent. Recent actions have led to an implicit carbon tax (USD 140 for petrol and USD 64 for diesel) in absolute terms.	Carbon tax could achieve reduction of 11 million tonnes of carbon in less than a year (INDC). FFSR could deliver -3.20% below BAU in 2020 and -2.73% below BAU in 2025 (GSI-IF)
Israel	clean energy subsidy	Removal of barriers for the uptake of renewable energy.	Not available
Jordan	clean energy subsidy	Improving the attractiveness of renewable electricity tariff by basing the purchase price on the cost of production. Implementing the power purchase agreements for the long term from renewable energy producers. Activating the recently established Renewable Energy and Energy Efficiency Fund (JREEEF).	Not available
Malawi	Carbon Price	Implementation of payment for ecosystem service for hydroelectric dams.	Not available
Mauritanie	Clean Energy Subsidy	L'exonération de la taxe des bus sortie usine pour le transport en commun	Not available

Country	Reference	Description and language	Implication e.g. emissions reduction figure if available and ref.
Mexico	Carbon Price	Mexico supports its INDC in a robust national climate change policy that includes, inter alia, the following instruments: General Climate Change Law. 2012 National Strategy on Climate Change, 10–20–40 years. 2013 Carbon tax. 2014 National Emissions and Emissions Reductions Registry. 2014 Energy reform (laws and regulations). 2014 Ongoing process for new set of standards and regulations	not available
Morocco	FFSR	Substantially reducing fossil fuel subsidies, building on reforms already undertaken in recent years.	-6.6% by 2030 (GSI-IF)
Namibia	Clean Energy Subsidy	Feed-in tariffs for the general public and other organizations to supply the grid with electricity: increase share renewables in electricity production from 33 per cent to 70 per cent.	reduction of about 89% of its GHG emissions at the 2030 time horizon compared to the BAU scenario, with 740 GHG reduction would be achieved by 2030 (INDC)
New Zealand	Carbon Price, FFSR	The Climate Change Response Act 2002 (the Act) contains the legal framework that enables New Zealand to meet its international climate change obligations. The Act was amended in 2008 to encompass the New Zealand Emissions Trading Scheme (NZ ETS) which is New Zealand's principal policy response for reducing domestic emissions. New Zealand is also an active member of the Friends of Fossil Fuel Subsidy Reform group.	not available
Norway	Carbon Price	Norwegian emissions are covered by the EU ETS, and Norway will, through our participation in the ETS, contribute to the necessary emission reductions.	not available
Republic of Macedonia	Clean Energy Subsidy	Capacity of power plants with feed-in tariffs is limited to the capacity for which a decision for temporary preferential producer has been issued by the Energy Regulatory Commission of the Republic of Macedonia. That is 65.4 MW for small hydro, 50 MW for wind, 18 MW for solar power plants and 7 MW biogas power plants	Not available
Senegal	FFSR, Clean energy Subsidies	Amélioration de la balance des paiements, voire un allègement du budget de l'État consacré aux subventions pout l'énergie	not available
Sierra Leone	FFSR, Clean Energy Subsidy	1) Establish a Sierra Leone Climate Fund to be a financing mechanism for priority climate change actions and interventions 2) Through this INDC, Sierra Leone is committed to implementing specific emissions-reduction actions, such as policies or mitigation actions like advancing a feed-in tariff for renewable energy technologies, phasing out fossil fuel subsidies or converting to no-tillage agricultural practices.	not available
Singapore	FFSR	Singapore prices energy at market cost, without any subsidy, to reflect resource scarcity and promote judicious usage. Singapore is pressing ahead to promote solar PV deployment through the provision of an enabling environment which: (a) facilitates system integration of intermittent sources to ensure grid stability and security; (b) addresses non-market barriers to entry without subsidizing the consumption of any form of energy; and (c) supports continued investment in research, development, and demonstration (RD&D) to reduce the cost of solar PV modules and improve their efficiency.	Not available

Country	Reference	Description and language	Implication e.g. emissions reduction figure if available and ref.
South Africa	Carbon Price, Clean Energy Subsidy	1) The policy instruments under development include a carbon tax, desired emission reduction outcomes (DEROs) for sectors, company-level carbon budgets, as well as regulatory standards and controls for specifically identified GHG pollutants and emitters. 2) South Africa established a South African Green Fund with an allocated USD 0.11 billion in the 2011 to 2013 budgets to support catalytic and demonstration green economy initiatives.	2025 and 2030, in which emissions will be in a range between 398 and 614 Mt CO_2–eq. (INDC)
Sri Lanka	Clean Energy Subsidy	Tax structures to promote sustainable technologies (Industry).	not available
St. Lucia	Carbon Price	National-level market-based instruments, such as cap-and-trade emission trading schemes and offsetting, are crucial to price carbon emissions and keep the costs of mitigation in Saint Lucia low. These will be pursued to encourage implementation of the proposed mitigation measures drawing on any applicable international arrangements.	not available
St. Vincent and the Grenadines	Clean Energy Subsidy,	1) Transport: new policies to reduce the import duty paid on low-emission vehicles are in the process of being introduced to encourage their use.	It is estimated that this will result in avoided emissions of approximately 10% over the next 10 years (INDC)
Swaziland	Carbon Price	Develop water pricing structures to encourage efficient water use.	not available (adaptation focused)
Gambia	Clean Energy Subsidy	Implement renewal energy law recommendations for feed-in-tariffs to attract investment in the renewable energy power plants, and publish FiT to give confidence to investors. Establish a Renewable Energy Fund	Not available
UAE	Clean Energy Subsidy, FFSR	Tariff reform: The UAE recognizes the value of energy and water tariff reform in reducing inefficiencies and promoting low-carbon development, as well as addressing energy security concerns. To this end, utility authorities in the UAE have introduced a number of initiatives and policies, revised the country's tariffs over the years and gradually adjust the tariffs for commercial and industrial customers, so as to reflect the cost of generation by 2021. The UAE is undertaking investments and initiatives, which will have significant mitigation co-benefits in addressing the transport sector's greenhouse gas emissions, including: • the introduction of a new fuel pricing policy, which will put the UAE in line with global prices. This reform aims to support the national economy, lower fuel consumption and protect the environment.	For FFSR -14.41% by 2020, -12.97% by 2025 (GSI-IF)
Vietnam	Clean Energy Subsidy, FFSR	Change the energy structure towards a reduced share of fossil fuel, encouraging the exploitation and use of renewable and low GHG emission energy sources. Apply market instruments to promote structural change and improve energy efficiency; encourage the use of clean fuels; support the development of renewable energy; implement the roadmap to phase out subsidies for fossil fuels.	FFSR could deliver -1.71% below BAU by 2020 and -1.86% below BAU by 2025 (GSI-IF)

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