C20 TURKEY

POLICY PAPERS

SUSTAINABILITY

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84%
of global fossil fuel emissions come from G20 countries (OECD).

17 of the top **20** largest emitters of carbon dioxide are G20 countries (EIA).

Over **1.4bn** people do not have access to electricity and a further **1bn** lack access to a reliable electricity source (UNDP).

In 2010, out of the **US$409bn** spent on fossil-fuel subsidies, only **US$35bn**, or **8%** of the total, reached the poorest **20%** (IEA).

Of the total **US$10.2bn** already pledged to the Green Climate Fund, only **58.5%** of these pledges have been signed.

C20 TURKEY SUSTAINABILITY POLICY PAPER
SUMMARY OF POLICY RECOMMENDATIONS

The G20 should:

1. Agree on a fair and equitable long term emission reduction and decarbonization goal.
2. Take a leadership role in supporting reliable, safe, sustainable and clean energy access for all by 2030.
3. Make a joint commitment to a 100% renewable energy future by 2050 and put investment in energy efficiency and renewable energy on a par with other infrastructure development programmes.
4. Diversify investment to include not only large scale and unsustainable mega projects but also decentralised, local infrastructure projects.
5. Take immediate action to completely and equitably phase out fossil fuel subsidies by 2020.
6. Direct public and private investments away from carbon intensive sectors and towards activities that are in line with transitioning to a renewable, low-carbon and climate-resilient economy.

AGREE ON A FAIR AND EQUITABLE LONG TERM EMISSION REDUCTION AND DECARBONIZATION GOAL

POLICY RECOMMENDATIONS:

1. Agree on a fair and equitable long term emission reduction and decarbonization goal

In accordance with the findings of the Intergovernmental Panel on Climate Change's (IPCC) 5th Assessment Report, it is essential for countries to rapidly transition to low-carbon economies in order to limit the average increase in global warming to 1.5/2ºC. Successfully transitioning to low-carbon economies will require a global long-term mitigation goal (LTG) that sets a vision of a carbon emissions-free future and encourages near-term action. It is imperative for the G20 countries, which account for 76% of global Greeenhouse Gas (GHG) emissions, to take clear steps towards deep decarbonization.

The G20 should:

- **Commit to decarbonize economies:** There is no other alternative to the transition to a world free from fossil fuels. A just and fair transition must and can be achieved. G20 leaders should acknowledge this fact and send a transformational message to investors, business leaders, and decision makers around the world. A commitment to phasing out all fossil fuel emissions and phasing in 100% renewable energy with sustainable energy access for all, as early as possible, but not later than 2050, is vital. G20 leaders are well-placed to offer a vision of an LTG (long term goal for emission reduction) that is both commensurate with the ambition required, and in line with the principle of equity. This will require articulating how effort will be fairly shared between countries, and how climate finance will be provided to enable developing countries to play their part in meeting the goal.
- **Operationalize the long-term goal through committing to national development planning in line with deep decarbonization:** G20 countries need to commit to national development planning in line with deep decarbonization requirements. The wealthy, industrialized countries within the G20 in particular should demonstrate leadership in transforming their own energy systems, primarily by immediately embarking on a fossil fuel phase-out and shifting to renewable energies. A substantial shift away from coal power generation by emerging and rich economies within the G20 is also a key stepping stone in that direction.
- Furthermore, defining common strategies to attain the emission reduction long-term goal, identifying strategic areas of cooperation for technology innovation and deployment, and application of decarbonization policies, should be the focus of the Group's engagement.

2. Take a leadership role in supporting reliable, safe & sustainable energy access for all by 2030

Billions around the world still have no access to modern energy services: 1.1 billion people still lack access to electricity, while 2.9 billion rely on wood, coal, charcoal, or animal waste for cooking.[1] Many of the low-carbon and renewable energies required to avoid catastrophic climate change are also those needed to achieve universal access to modern energy services. This is particularly the case with electricity, where decentralized (mostly renewable) solutions are needed for universal access.There is ample proof that it is more feasible, sustainable and cost-effective to connect rural communities, which form the vast majority of the energy poor, to small/mini and off-grid–connected energy sources (mostly renewable).[2] Studies show that to reach the target of universal access by 2030, at least 55 per cent of new electricity generation will have to come from decentralized (mostly renewable) energy sources.[3]

In order to achieve universal energy access by 2030, increased financial, political and technical support is needed from G20 countries to support decentralized (off-grid) energy solutions, especially for electricity access. It also must be recognised that there are opportunities for having large programmes for providing basic electricity needs to the poorest of the poor by means of renewable energy systems, which will also generate employment opportunities.

The G20 should:

- **Take a leadership role in supporting reliable, safe and sustainable energy access for all**: The G20 should support decentralized options and models of renewable energy, along with smart grids and hybrid options, in order to ensure clean, affordable and reliable energy access for all by 2030. By doing so, the G20 would not only lift billions out of energy poverty but also have huge co-benefits in terms of health and employment. These options should, where possible and appropriate, favor locally available sources of renewable energy.
- **Adopt the total energy access approach:** G20 member countries should take a 'total energy access' approach to energy policies at domestic level and at the level of international cooperation, whereby indicators that measure the affordability, quality, safety and reliability of energy services provided to end users are used to judge the success of G20 energy access policies. Such a 'total energy access' approach is the only means by which the G20 can meaningfully measure whether or not its policies truly contribute to individual, household, enterprise and community access to the sufficient, reliable and affordable energy supplies and services that are required to eradicate poverty and support sustainable development.[4] Existing approaches , which merely capture energy supply through grid connection or megawatts of power generated, are insufficient for this service.

3. Make investment in energy efficiency and renewable energy one of the central focuses for infrastructure development programmes:

Investing in energy efficiency and renewable energy and shifting away from use of fossil fuels provide ample economic benefits. Well-designed infrastructure projects can contribute to the establishment of sustainable growth by creating economic benefits such as jobs, improved productivity and competitiveness. For example, it has been estimated that such savings in the USA alone could reach US$190 billion annually by 2020.[5] The Mexican corporate sector could save the equivalent of 8 per cent of the country's GDP by 2020 if investment in energy efficiency and renewables starts now[6].

1. The World Bank and IEA. (2015) Progress Toward Sustainable Energy: Sustainable Energy for All Global Tracking Framework 2015 Key Findings. http://trackingenergy4all.worldbank.org/~/media/GIAWB/GTF/Documents/GTF-2015-Key-Findings.pdf

2. Craine, S./ Mills, E./ Guay, J. (2012) Clean Energy Services for All: Financing Universal Electrification. Sierra Club.

3. Pachauri, S. et al (2013): Pathways to achieve universal household Access to modern energy by 2030, Envirion Res. Lett. 8, http://iopscience.iop.org/1748-9326/8/2/024015.

4. Garside, B., Leopold A. & Wykes, S. (2014)).Se further elaboration of Total Energy Access (TEA) approach see http://practicalaction.org/totalenergyaccess

5. The 3% Solution: Driving Profits Through Carbon Reductions, WWF-US and CDP, 2013 https://c402277.ssl.cf1.rackcdn.com/publications/575/files/original/The_3_Percent_Solution_-_June_10.pdf?1371151781

6. Private Sector and Low Carbon Growth in Mexico, WWF-Mexico, 2014 http://d2ouvy59p0dg6k.cloudfront.net/downloads/8__private_sector_and_low_carbon_growth_in_mexico_online_version.pdf

Urthermore, a significant collection of studies indicate that by 2050, 100% of global energy demand can be met through renewable resources. This is not only technically and economically feasible but also desirable in order to meet the global climate challenge and to take advantage of the huge co-benefits of energy efficiency improvement and renewable energy development.

In order to make this transition happen, G20 countries need to adopt appropriate policy and investment frameworks to ensure a fast scale up of renewable energy and energy efficiency measures. The G20 is well poised to be a leader and help mitigate the early jitters of investments in the new and fast emerging renewable energy and energy efficiency industries, and thus send a clear signal to domestic financial markets in the fast growing economies to support these investments.

The G20 should:

- **Make a joint commitment to a 100% renewable energy future by 2050.** G20 leadership on renewable energy development will send a clear signal to domestic financial markets, and will also further promote investments globally. G20 countries should coordinate policies and cooperate internationally for achieving the ambition of renewable energy development, including greater bilateral and multilateral trust and facilitation of free trade in environmentally friendly goods. G20 and particularly the industrialized countries within the G20 must lead the way in providing adequate public finance, as well as cooperation in innovation and technology transfer, for scaling up renewable energy in developing economies.
- **Consider eenergy efficiency as one of the G20's infrastructure priorities:** National energy efficiency investment needs are on par with other major infrastructure choices. Promoting investment in this sector can buttress climate policy, improve the quality of people's lives and involve millions of people in its implementation. G20 should commit to (i) reclassify investment in energy efficiency as an infrastructure priority; (ii) undertake an assessment of structural reforms to address financing barriers and grow markets for improving energy productivity; (iii) deliver sufficient public funding by providing equal access to finance among households and leverage the large scale private finance needed to improve the energy efficiency infrastructure.

MAKE A JOINT COMMITMENT TO A 100% RENEWABLE ENERGY FUTURE BY 2050

4. Diversify investment to include not only large scale and unsustainable mega projects but also decentralised , local infrastructure projects.

Megaprojects are large-scale and complex investments that typically cost billions, take many years to complete, involve multiple public and private actors and stakeholders, and impact millions of people directly or indirectly. While infrastructure investments are meant to serve the needs of the people as they meet the ever growing demand for transportation, water, and energy, the side effects of such megaprojects can at times be counterproductive and unsustainable.

Governments usually outsource the operation of such projects and those contracts often include guaranteed returns, assuming a certain number of clients, consumers and users. Even if these numbers never materialize, governments often have to fill in and pay for the losses. The economic gains are often privatized by the investors, while social and environmental costs and damages are socialized and put on the shoulders of the taxpaying citizen.

The G20 should:

- Be responsive to "bottom-up" demand for infrastructure in the context of locally- and nationally-owned strategies.
- Shift the focus from large scale centralized megaprojects and give equal priority to decentralized, local infrastructure projects that are conducted through environmentally sustainable methods and with a democratic and transparent approach, allowing fair participation of the stakeholders in the decision making process and recognising the rights of the local communities.

5. Take immediate action to equitably phase out fossil fuel subsidies

The costs of fossil fuel subsidies are staggering. G20 countries currently pay over USD 1,000 per citizen in fossil fuel subsidies each year,[7] according to the IMF.[8] In each G20 summit since 2009, G20 leaders have pledged to phase out inefficient fossil fuel subsidies. Such subsidies drive excessive production and consumption of fossil fuels, causing pollution and climate disruption while robbing treasuries of resources that could be used for public services and sustainable development. Evidence shows that at least USD 700 billion and perhaps more than USD 1 trillion of public resources is spent on fossil fuel subsidies each year.[9] If unpriced externalities from fossil fuels are added in – like the negative health impacts on local pollution and greenhouse gas (GHG) emissions – this figure rises to USD 5.3 trillion, according to the latest estimates of the IMF.[10] Phasing out fossil fuel subsidies can deliver multiple benefits: on climate and health through reduced emissions; and on finance, by freeing up resources for clean alternatives to fossil fuels and other pro-poor investments.

In addition, fossil fuel exploration among G20 countries receives USD 88 billion per year in public funding.[11] However, the vast majority of known fossil fuel reserves cannot be burned if catastrophic climate change is to be avoided, yet G20 governments waste billions each year to find new resources that can never be burned. Starting with removal of these exploration subsidies, G20 governments can redirect these resources to advance other sustainable development priorities.

COMPLETELY AND EQUITABLY PHASE OUT OF FOSSIL FUEL SUBSIDIES BY 2020

The G20 should:

- **Urgently complete the preparatory work necessary to live up to the Pittsburgh commitment to phase out fossil fuel subsidies:** It is urgent to intensify the preparation for the G20 peer-review reports by end of 2015.
- **Completely and equitably phase out fossil fuel subsidies by 2020:** the G20 should call for an immediate end to government support for fossil fuel exploration, adoption of a strict timeline for the phase-out of remaining fossil fuel production subsidies and an equitable phase-out of consumption subsidies (including bilateral and multilateral finance), with country-specific measurable outcomes, and a commitment to greater transparency in reporting on fossil fuel subsidy expenditure. The removal of subsidies must be accompanied by complementary measures to ensure that people living on lower incomes and other vulnerable groups do not suffer any negative effects from subsidy removal.
- **Play a leadership role in phasing out fossil fuel subsidies:** G20 countries should also make use of their global influenceto leverage greater global consensus on the need for equitable fossil fuel subsidy phase-out.

6. Climate Finance: Redirect investments in pace and scale

Held only two weeks before UNFCCC COP21, the G20 Summit is an ideal opportunity to strengthen international confidence and momentum towards an ambitious new climate agreement in Paris and to show commitment to low-emission and climate-resilient development.

It is recognized that additional public finance will be needed in order to make it possible for developing countries to finance adaptation, loss and damage, and to develop low-carbon paths.

7. Carrington, D. August 4, 2015. "G20 countries pay over $1,000 per citizen in fossil fuel subsidies, says IMF." The Guardian. http://gu.com/p/4b6cc/stw

8. IMF. 2015. How Large are Global Energy Subsidies? Country-level subsidy estimates database. http://www.imf.org/external/np/fad/subsidies/data/codata.xlsx

9. Oil Change International. No Time to Waste: The urgent need for transparency in fossil fuel subsidies. http://priceofoil.org/content/uploads/2012/05/1TFSFIN.pdf

10. Coady, D., et al. 2015. How Large are Global Energy Subsidies? IMF. http://www.imf.org/external/pubs/ft/wp/2015/wp15105.pdf

11. Bast, E., et al. 2014. The fossil fuel bailout: G20 subsidies for oil, gas and coal exploration. http://priceofoil.org/content/uploads/2014/11/G20-Fossil-Fuel-Bailout-Full.pdf

Public finance is particularly crucial for helping countries and communities living in poverty to adapt to and cope with climate change – those with the least resources to protect themselves from the impacts of climate change tend to live in areas which do not attract private investment. In order to enable this and avoid a diversion of Official Development Aid (ODA) spending, new and innovative sources of finance need to be identified and introduced.

G20 SHOULD SIGNIFICANTLY INCREASE CLIMATE FINANCE

Additionally, in order to set the world on a low carbon pathway that fosters climate resilience and poverty eradication, G20 economies need to spearhead large-scale shifts within national and international economic, social and environmental policies. These shifts require action from governments, the private sector and individuals.

The G20 should:

- **The G20 member countries need to walk the talk on "shifting the trillions"**. G20 governments need to develop and enact long-term climate legislation and robust policy frameworks that direct public and private investments away from carbon intensive sectors and towards activities that are in line with transitioning to a renewable, low-carbon and climate-resilient economy. G20 countries need to commit to positively steer national policies to facilitate the required financial investments related to such action.
- **The G20 should identify and introduce new and innovative sources of climate finance**: the G20 should advocate for the employment of new and innovative sources of public finance including –but not limited to- the following: (i) carbon pricing of revenues generated from international aviation and shipping through measures adopted by IMO/ICAO or a national basis and in introduced in a manner that ensures sufficient differentiation; (ii) other revenues, including from emissions trading schemes, road pricing, a global fossil fuel extraction levy, and a Financial Transaction Tax. This also adheres to the polluter-pays principle and thus creates additional incentives towards low-carbon investments.
- **The G20 should pledge to significantly increase public finance for climate action:** Before Paris, those developed countries that have not already done so should make a quantified pledge to increase annual finance from public budgets between now and 2020 to meet the existing $100bn commitment to support climate action in less developed countries by 2020. All countries in a position to do so should signal their willingness to contribute to new, scaled-up collective financing commitments for both adaptation and mitigation in the post-2020 agreement. Additional finance for adaptation should be prioritised so that adaptation receives half of overall finance flows. At the same time, the G20 must ensure strict controls so that this public finance is not diverting existing Official Development Assiatnce (ODA) from other development needs, and is used as efficiently and effectively as possible for the protection of the climate while ensuring equitable and gender-responsive benefit-sharing, particularly for the most vulnerable and marginalized population groups.
- **The G20 should commit to recognize and assess the systemic risk climate change represents for the stability of financial markets:** There is increasing evidence of the potential risks that climate change can pose to the stability of financial markets, not only the stranded assets risk, but also a wider risk to the whole economy (food sector, tourism, cities, insurances, etc.). In early 2015, the G20 asked the **Financial Stability Board** in Basel to convene a public-private inquiry into the fall-out faced by the financial sector as climate rules become much stricter. Based on the recommendations of the Financial Stability Board, the G20 should mandate the disclosure and management of climate and carbon risks in the whole financial sector. It may also be necessary to advocate standards or safeguards for public and private finance, including foreign direct investment (FDI), ensuring that infrastructure projects contribute to inclusive and sustainable development. In addition, the G20 should convene a permanent institutional arrangement to follow up the results of the FSB's review and manage policies and measures that will allow all G20 countries to deal with these increasing systemic financial risks.

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