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Fuel Price Policies

Reading List 2001 – 2014

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CONTENTS

1 Policies, Subsidies, Taxation

2014

Database of fuel subsidy estimates
This includes a wide range of sources (GSI, IEA, IMF, OECD, CEEER) and shows support estimates in nominal amounts, USD per capita, as a percentage of GDP and percentage of public expenditure.
http://www.iisd.org/gsi/interactive-maps

Energy subsidies – Scrap them
There are moves around the world to get rid of energy subsidies. Here's the best way of going about it. For decades, governments from Egypt to Indonesia have subsidised the price of basic fuels. Such programmes often start with noble intentions—to keep down the cost of living for the poor or, in the case of oil-producing countries, to provide a visible example of the benefits of carbon wealth—but they have disastrous consequences, wrecking budgets, distorting economies, harming the environment and, on balance, hurting rather than helping the poor.
http://www.economist.com/news/leaders/21604170-there-are-moves-around-world-get-rid-energy-subsidies-heres-best-way-going

Energy subsidies: Fuelling controversy
Over the past year energy subsidies have become a target for politicians on austerity drives. In June Indonesia increased petrol prices by 44 % to cut its annual subsidy bill of USD 20 billion. More recently Malaysia followed suit, in the hope of filling a budget hole which had reached 4.5 % of GDP. It slashed petrol subsidies, and on 1st January household energy bills went up by 15 %. Countries such as Egypt and India are considering similar measures to reduce their growing budget deficits; Egypt's is now at 14 % of GDP.
http://www.economist.com/news/finance-and-economics/21593484-economic-case-scrapping-fossil-fuel-subsidies-getting-stronger-fuelling?frsc=dg%7Ca&fsrc=scn/tw_app_ipad

Dirty little secrets: Inferring fossil-fuel subsidies from patterns in emission intensities
No comprehensive database of directly measured fossil-fuel subsidies exists at the international or the sub-national level, yet subsidies may be crucial drivers of global carbon emissions. This column describes a novel method for inferring carbon subsidies by examining country-specific patterns in carbon emission-to-output ratios, known as emission intensities. Calculations for 155 nations from 1980–2005 reveal that fossil-fuel price distortions are enormous, increasing and often hidden. These subsidies contributed importantly to increasing emissions and lower growth.
http://www.voxeu.org/article/inferred-fossil-fuel-subsidies-new-database

Comparison of Fossil-Fuel Subsidy and Support Estimates
For more information about estimating subsidies, see the GSI's subsidy accounting manual, Subsidy Estimation: A Survey of Current Practice, and the related policy brief, A How-To Guide: Measuring subsidies to fossil-fuel producers.
http://www.iisd.org/gsi/technical-manuals

2013

International Fuel Prices 2012/2013 — GIZ
Data preview
http://www.giz.de/expertise/downloads/Fachexpertise/giz2013-en-ifp2013.pdf

2013

The Economic Cost of Global Fuel Subsidies
By 2015, global oil consumption will reach 90 million barrels per day. In part, this high level of consumption reflects the fact that many countries provide subsidies for gasoline and diesel. This paper examines global fuel subsidies using the latest available data from the World Bank, finding that road-sector subsidies for gasoline and diesel totalled USD 110 billion in 2012. Pricing fuels below cost is inefficient because it leads to overconsumption. Under baseline assumptions about supply and demand elasticities, the total annual deadweight loss worldwide is USD 44 billion. Incorporating external costs increases the economic costs substantially
http://www.uce3.berkeley.edu/WP_069.pdf

Time to change the game – Fossil fuel subsidies and climate
Fossil fuel subsidies undermine international efforts to avert dangerous climate change and represent a drain on national budgets. They also fail in one of their core objectives: to benefit the poorest. Phasing out fossil fuel subsidies would create a win-win scenario. It would eliminate the perverse incentives that drive up carbon emissions, create price signals for investment in a low- carbon transition and reduce pressure on public finances.
http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8668.pdf

At cross-purposes: Subsidies and climate compatible investment
There is widespread consensus that the private sector must be mobilised to support climate-compatible development (CCD). There is also broad acknowledgment, however, that we have only limited information and data on how best to achieve this goal. To date, the discourse on climate finance in general, and on private climate finance (PCF) in particular, has barely acknowledged the use of subsidies as tools to mobilise the private sector.
http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8335.pdf

The Long-run Macroeconomic Impacts of Fuel Subsidies
Many developing and emerging market countries have subsidies on fuel products. Using a small open economy model with a non-traded sector I show how these subsidies impact the steady state levels of macroeconomic aggregates such as consumption, labour supply and aggregate welfare. These subsidies can lead to crowding out of non-oil consumption, inefficient inter-sectoral allocations of labour, and other distortions in macroeconomic variables.
http://www.dallasfed.org/assets/documents/research/papers/2013/wp1303.pdf

The long-run macroeconomic impacts of fuel subsidies in an oil-importing developing country
Analytical and numerical results show how the presence of a subsidy on household and firm purchases of oil products distorts long-run macroeconomic aggregates in an oil-importing developing country. Beyond leading to over-consumption of oil products these subsidies also lead to increased labour supply, a distorted emphasis on producing traded goods, and higher real wages. The subsidy also impacts the relative price of non-traded goods, causing it to fall when the non-traded sector is more oil-intensive than the traded sector and vice-versa.
http://econpapers.repec.org/paper/pramprapa/33823.htm

UNITED STATES: Effects of U.S. Tax Policy on Greenhouse Gas Emissions
Current federal tax provisions have minimal net effect on greenhouse gas emissions, according to a new report from the National Research Council. The report found that several existing tax subsidies have unexpected effects, and others yield little reduction in greenhouse gas emissions per dollar of revenue loss.
http://www.nap.edu/catalog.php?record_id=18299

2012	**International Fuel Prices 2010/2011 – GIZ** This edition is based on our survey in mid-November 2010 and provides a snapshot based on the crude oil price level of USD 81 per barrel. http://www.giz.de/expertise/downloads/giz2012-en-ifp2010.pdf **Measuring Global Gasoline and Diesel Price and Income Elasticities** Price and income elasticities of transport fuel demand have numerous applications. They help forecast increases in fuel consumption as countries get richer, they help develop appropriate tax policies to curtail consumption, help determine how the transport fuel-mix might evolve, and show the price response to a fuel disruption. Given their usefulness, it is understandable why hundreds of studies have focused on measuring such elasticities for gasoline and diesel fuel consumption. In this paper, I focus my attention on price and income elasticities in the existing studies to see what can be learned from them. I summarize the elasticities from these historical studies. http://www.sciencedirect.com/science/article/pii/S0301421510008797
2011	**Fuel Taxes vs Fuel Economy: Are Stricter Fuel Economy Standards a Good Idea?** According to news reports, the Obama administration is talking to automakers about raising the Corporate Average Fuel Economy standard for passenger cars to 56.2 miles per gallon by 2025, more than double the 27.5 MPG in force for the 20 years up to 2010. Economists, even those like myself who favour policies to reduce fuel use, have argued that CAFE standards are a bad idea. Has anything changed to make stricter fuel economy standards look better now than in the past? http://oilprice.com/Energy/Energy-General/Fuel-Taxes-vs-Fuel-Economy-Are-Stricter-Fuel-Economy-Standards-a-Good-Idea.html **The Myths and Facts of Fossil Fuel Subsidies: A Critique of Existing Studies** Fossil fuel subsidies are of enormous import to policy-makers and public opinion, making it critical to properly define them. However, traditional methodologies tend to place subsidies in the realm of tax expenditure analysis, presenting a flawed picture. A recent report on government subsidies to the Canadian energy sector prepared for the International Institute for Sustainable Development exemplifies this flawed approach along several dimensions: it is not based on a robust underlying economic framework, it fails to account for complex interactions between tax and royalty systems in existing fiscal policy, and it uses a definition of subsidies that was created for a different purpose. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1940535
2010	**Subsidy Estimation: A Survey of Current Practice** This technical manual draws together the different subsidy estimation methods that are used and have been published, mainly by intergovernmental organizations and governments. http://www.iisd.org/gsi/technical-manuals **Measuring Subsidies Using The Price-Gap Approach** The price-gap approach is one of the most commonly employed methodologies for estimating fossil-fuel subsidies: calculating the difference between the observed price for a fuel against what that price would be without government intervention. This report explains how the price-gap method works, reviews its benefits and limitations, and explores the potential for bias in estimates. http://www.iisd.org/gsi/technical-manuals

2010

Corruption and Fraud in Agricultural and Energy Subsidies: Identifying the Key Issues
Governments appear willing to provide publicly funded subsidy programs totalling billions of dollars, but they commit significantly fewer resources to monitor these programs effectively to prevent fraud and or corruption. This policy brief identifies some of the main areas of subsidy policy affected by fraud and corruption, providing examples of some high profile cases.
http://www.iisd.org/gsi/december-2010-corruption-and-fraud-agricultural-and-energy-subsidies-identifying-key-issue

Defining Fossil-Fuel Subsidies for The G-20: Which Approach Is Best?
The G-20's efforts to progress fossil-fuel subsidy reform have revived an old debate: what is a subsidy? In this policy brief, the GSI recommends a three-step process to define, measure and evaluate subsidies, beginning with a broad definition that covers preferential treatment in all its forms.
http://www.iisd.org/gsi/march-2010-defining-fossil-fuel-subsidies-g-20-which-approach-best

A How-to Guide: Measuring Subsidies to Fossil-Fuel Producers
This policy brief identifies how different types of subsidy can be measured using different methodologies, particularly fossil-fuel producer subsidies. It is the second stage in the GSI's recommended 3-step process for planning subsidy reform: define, measure and evaluate. Where relevant, it refers readers to the GSI's in-depth technical manual, Subsidy Estimation: A Survey of Current Practice
http://www.iisd.org/gsi/july-2010-how-guide-measuring-subsidies-fossil-fuel-producers

Petroleum Subsidies on the Rise
According to a study from the IMF, petroleum subsidies are costly, inequitable and rising, and reducing them could have benefits for the environment.
http://www.imf.org/external/pubs/ft/survey/so/2010/pol050410a.htmG20

Fossil Fuel Prices in the Arab World – GIZ
In light of recent international developments, notably the G-20's commitments to phase out inefficient fossil-fuel subsidies that encourage wasteful consumption, reform of fossil-fuel subsidies has come into the spotlight. No subsidy reform, however, can take place without a reform of the pricing mechanism. In this context, Arab countries can be noted for their heavy subsidization of fossil fuels. Also *ad hoc* pricing of petroleum products is dominant there. With the exception of a few countries, it is also a region, where the least action has been made in recent years to tackle the subject. Reforms are small and subject to fall backs. This working paper contributes to the ongoing discussion by sketching the Arab countries' current pricing mechanisms, the rationale behind this system of consumer subsidies and *ad hoc* pricing, the inevitable need for reform, and eventual attempts to draw pathways for reform.
http://www.giz.de/expertise/downloads/Fachexpertise/giz2010-en-fuel-prices-in-the-arab-world.pdf

Fossil-Fuel Subsidy Phase Out: A review of current gaps and needed changes to achieve success
The G20 commitment was a positive step in reforming policies that subsidize the oil, gas and coal industries at a time when the world is concurrently trying to scale back emissions that contribute to climate change. This brief highlights a variety of issues that illustrate immediate and future challenges with making the phase out work. The authors evaluated the reporting and reform efforts of the G20, using official documents that were submitted by the members. The purpose of this evaluation was to assess the coverage of existing reporting, identify patterns in arguments countries put forth to exclude policies from reform, and discuss options to increase the chance of the reform effort being successful.
http://www.earthtrack.net/documents/g20-fossil-fuel-subsidy-phase-out-review-current-gaps-and-needed-changes-achieve-success

The Unequal Benefits of Fuel Subsidies: A Review of Evidence for Developing Countries
This paper reviews evidence on the impact of fuel subsidy reform on household welfare in developing countries. On average, the burden of subsidy reform is neutrally distributed across income groups; a USD 0.25 decrease in the per litter subsidy results in a 6 % decrease in income for all groups. More than half of this impact arises from the indirect impact on prices of other goods and services consumed

2010	by households. Fuel subsidies are a costly approach to protecting the poor due to substantial benefit leakage to higher income groups. In absolute terms, the top income quintile captures six times more in subsidies than the bottom. Issues that need to be addressed when undertaking subsidy reform are also discussed, including the need for a new approach to fuel pricing in many countries. http://www.imf.org/external/pubs/cat/longres.cfm?sk=24184.0 **Mapping the Characteristics of Producer Subsidies: A review of pilot country studies** This paper reviews data sources for fossil-fuel subsidies in a series of countries with a range of differing governance systems, energy markets and stages of economic growth. Using a detailed matrix setting out the main subsidy policies, the type of fuel and their main data sources, pilot studies have been completed for China, Germany, Indonesia and United States. The report begins to characterise the major subsidy types applied to fossil fuels and the current state of knowledge about each of these categories. The project team for each country evaluated commonly referenced data sources (*e.g.*, databases collected by international bodies) and summarized how the information is gathered, with an important element of the research being an assessment of the data sources, including their strengths and limitations. http://www.iisd.org/publications/pub.aspx?pno=1327 **The Effect of CO_2 Pricing on Conventional and Non-Conventional Oil Supply and Demand** What would be the effect of CO_2 pricing on global oil supply and demand? This paper introduces a model describing the interaction between conventional and non-conventional oil supply in a Hotelling framework and under CO_2 constraints. The model assumes that non-conventional crude oil enters the market when conventional oil supply alone is unable to meet demand, and the social cost of CO_2 is included in the calculation of the oil rent at that time. The results reveal the effect of a CO_2 tax set at the social cost of CO_2 on oil price and demand and the uncertainty associated with the time when conventional oil production might become unable to meet demand. http://www.economicsclimatechange.com/2010/12/effect-of-co2-pricing-on-conventional.html?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+ClimateChanges+%28Climate+ChangeS%29 **Report of the Expert Group on a Viable and Sustainable System of Pricing of Petroleum Products** India's growing dependence on imported oil products and the dramatic rise in the prices of crude oil to as high as USD 148/bbl the international market in July 2008, followed by an equally dramatic fall, pose significant policy challenges. The Government's efforts to insulate domestic consumers, at least to some extent, resulted in huge fiscal burden for the Government and financial problems for the public sector oil marketing companies. http://petroleum.nic.in/reportprice.pdf
2009	**Macroeconomic Uncertainties, Oil Subsidies and Fiscal Sustainability in Asia** Global oil prices have subsided relative to the peak reached in mid-2008, but compared to historical levels they remain elevated and volatile as economic uncertainties continue to unfold. The likelihood of these prices rising again soon cannot be ruled out. High oil prices can adversely affect growth, employment, external accounts and fiscal positions of governments. An overwhelming response across Asia as international oil prices spiked in 2008 was to shield domestic consumers more than before through oil subsidies, which are inequitable, economically inefficient and environmentally unfriendly. These subsidies add directly to the fiscal deficit and public debt, but are generally hidden, making their measurement difficult. Additionally, in combination with lower growth rates, higher spending to rev up demand across Asia is also worsening the fiscal positions of governments. This paper computes the transmission of recent global oil price movements to domestic markets and estimates oil price subsidies in a diverse group of 32 Asian economies. Using data for 18 of these countries and applying a forward-looking methodology for debt dynamics, the paper then examines the potential impact of responses to macroeconomic shocks and a possible rise in oil prices on public debt and estimates the fiscal correction needed to sustain debt at a steady-state level. Based on the findings

2009	from the empirical analysis, the paper extracts some guiding principles for fiscal policy responses to the economic shocks depending on country-specific circumstances. http://www.adb.org/Documents/Working-Papers/2009/Economics-WP150.pdf **Estimating the Effect of a Gasoline Tax on Carbon Emissions** Several policymakers and economists have proposed the adoption of a carbon tax in the United States. It is widely recognized that such a tax in practice must take the form of a tax on the consumption of energy products such as gasoline. Although a large existing literature examines the sensitivity of gasoline consumption to changes in price, these estimates may not be appropriate for evaluating the effectiveness of such a tax. http://www-personal.umich.edu/~lkilian/gasoline27.pdf **Petroleum Prices, Taxation and Subsidies in India** The current Indian system of effectively subsidised petroleum product prices has significant implications for the emergence of India as a major global energy consumer, for the integrity of India's Central Government budget and for investment in India's growing oil and petroleum sector. This paper is part one of a broader study that looks at the current system of petroleum pricing and the macroeconomic, microeconomic, regional and global effects of this system. https://www.iea.org/publications/freepublications/publication/petroleum_pricing.pdf
2008	**A Subsidy Primer** A plain-language guide on subsidies, defining their different types, purposes, roots and impacts. http://www.iisd.org/gsi/sites/default/files/primer.pdf **Fuel and Food Price Subsidies – Issues and Reform Options** This paper discusses the key issues and policy options in the reform of subsidies for fossil fuels and selected food commodities, and their implications for the work of the Fund. http://www.imf.org/external/pp/longres.aspx?id=4293
2007	**Ecosystem Subsidies of Fossil Fuels** Ecosystems provide the invaluable service of collecting and storing solar energy as fossil fuels (*e.g.*, coal, petroleum and natural gas). These concentrated forms of energy were gifted to us by the sun and collected and stored for our use by ancient ecosystem services. However, our legal and economic systems fail to recognize the value of this ecosystem service that is embedded in fossil fuels. As a result, society uses fossil fuels as though they were free and inexhaustible. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1117564 **Domestic Petroleum Product Prices and Subsidies: Recent Developments and Reform Strategies** The paper reviews recent developments in the pass-through of international to domestic petroleum product prices, in the different fuel pricing regimes, and in fuel subsidies in a range of emerging market and developing economies. http://www.imf.org/external/pubs/cat/longres.cfm?sk=20608 **Fuel Price Subsidies in Gabon: Fiscal Costs and Distributional Impact** This paper looks at the fiscal cost and distributional impact of implicit fuel price subsidies in Gabon, where fuel prices have remained largely unchanged since 2002. http://www.imf.org/external/pubs/cat/longres.cfm?sk=19906.0

2007	**The Magnitude and Distribution of Fuel Subsidies Evidence from Bolivia, Ghana, Jordan, Mali and Sri Lanka** This paper identifies the issues that need to be discussed when analysing the fiscal and social costs of fuel subsidies. Using examples from analyses recently undertaken for five countries, it also identifies the magnitude of consumer subsidies and their fiscal implications. http://www.imf.org/external/pubs/ft/wp/2006/wp06247.pdf **Household Energy Supply and Use in Yemen: Volume I, Main Report – Chapter 5: Petroleum Product Subsidies** This chapter reviews the pricing system of petroleum products and the magnitude of the subsidies involved. http://go.worldbank.org/DW6H3NPHW0 **Energy Subsidies: Their Magnitude, How they Affect Energy Investment and Greenhouse Gas Emissions, and Prospects for Reform** This work represents a detailed analysis of energy subsidies with respect to size, impact and resulting political implications. http://unfccc.int/files/cooperation_and_support/financial_mechanism/application/pdf/morgan_pdf.pdf **Affordability and Subsidies in Public Urban Transport: What Do We Mean, What Can Be Done?** This paper reviews the arguments used to justify subsidy policies in public urban transport and finally substantiates that more effort should be devoted to improve the targeting of public urban transport subsidies. http://econpapers.repec.org/paper/wbkwbrwps/4440.htm **Impact of a Lower Oil Subsidy on Indonesian Macroeconomic Performance, Agricultural Sector and Poverty Incidences: A Recursive Dynamic Computable General Equilibrium Analysis** The study objective is to analyse the impact of reducing fuel subsidy on macroeconomic variables, agricultural sector and income distribution. The results show that the reduction in fuel price subsidy tends to increase prices of industrial outputs that highly depend on fuel, such as transportation and fishery sectors. http://ideas.repec.org/p/lvl/mpiacr/2007-28.html **Where Oil Markets Indeed are "Well Supplied"** This paper briefly compares and analyses fuel price policies of OPEC members. http://www.jec.senate.gov/republicans/public/?a=Files.Serve&File_id=a993d5be-4544-4902-b3d4-509d61c47360 **Understanding the Factors That Influence the Retail Price of Gasoline** A US-focused work which presents detailed information on the factors that influence the price of gasoline and, to the extent possible, why those factors have developed. Specifically, the work explains how gasoline is made and distributed in the US. http://www.gao.gov/new.items/d05525sp.pdf
2002	**Issues in Domestic Petroleum Pricing in Oil-Producing Countries** This paper discusses issues relating to the domestic pricing of petroleum in oil-producing countries. Moreover, the paper argues, petroleum subsidies are inefficient and inequitable. Nonetheless, the elimination of petroleum subsidies is often politically difficult, although countervailing measures and publicity campaigns can help engender support for reform. http://www.imf.org/external/pubs/ft/wp/2002/wp02140.pdf

2001

Petroleum taxes: Trends in fuel taxes (and subsidies) and the implications
This recent World Bank analysis shows that taxes on petroleum products are a critical source of government revenue for low-income countries. The rates of these taxes will have to rise sharply as low-income economies develop. But policymakers must be mindful of how taxes (and subsides) affect the relative prices of fuels, since too large a difference in process between products cab lead to fuel switching and adulteration, adversely affecting the government tax take and pollution levels.
http://siteresources.worldbank.org/EXTFINANCIALSECTOR/Resources/282884-1303327122200/240Bacon-831.pdf

2 Policy Responses

2014	**Subsidy Reform in the Middle East and North Africa: Recent Progress and Challenges Ahead** In the Middle East and North Africa (MENA) countries price subsidies are common, especially on food and fuels. However, these are neither well targeted nor cost effective as a social protection tool, often benefiting mainly the better off instead of the poor and vulnerable. This paper explores the challenges of replacing generalized price subsidies with more equitable social safety net instruments, including the short-term inflationary effects, and describes the features of successful subsidy reforms. http://www.imf.org/external/pubs/ft/dp/2014/1403mcd.pdf **Reform of Fossil-fuel Subsidies** Fossil-fuel subsidies matter: for sustainable development; for government budgets; for the poor; for women; and for the environment. Subsidies amounted to USD 544 billion (2012) and are largest in MENA and Southeast Asia. Reforming and redirecting subsidies will be an important piece of the jigsaw if we are to solve the climate change puzzle. Savings enable governments to manage deficits; could be redirected at building energy networks; or targeted at social spending. http://www.norden.org/en/publications/publikationer/2014-903 **GSI Case studies: Lessons Learned From Attempts to Reform Fossil-Fuel Subsidies** The GSI has developed a broad range of case studies of fossil-fuel subsidy reform. This includes a review of subsidies and reform attempts across APEC economies and case studies on Brazil, France, Ghana, North Sudan, Malaysia, India, Indonesia, Iran, Poland and Senegal. http://www.iisd.org/gsi/fossil-fuel-subsidies/case-studies-lessons-learned-attempts-reform-fossil-fuel-subsidies **Sector-Specific Reforms: Petroleum and Electricity** Presentation for Reforming Fossil Fuel Subsidies for an Inclusive Green Economy Conference – 28 and 29 April 2014 in Nairobi, Kenya http://www.unep.org/greeneconomy/Portals/88/Research%20Products/Session%203b_Armin%20Wagner_GIZ%20-%20Copy.pdf
2013	**International comparison of light-duty vehicle fuel economy: An update using 2010 and 2011 new registration data** In the first edition of this report, the main finding highlighted that global fuel economy improved by an average of 1.7 % per year between 2005 and 2008, far below the required 2.7 % annual improvement rate to reach the GFEI target of halving new light duty vehicle fuel economy (in l/100 km or g CO_2/km) by 2030. http://www.globalfueleconomy.org/Documents/Publications/wp8_international_comparison.pdf **Reforming fuel pricing in an age of USD 100 oil** This study focuses on the evolving role of oil in national economies, particularly those of developing countries, and proposes a menu of options for drawing a roadmap for pricing policy reform for oil products. In light of events since 2009, it examines how recent price movements have affected countries' vulnerability to world oil price increases, how governments have adjusted domestic fuel prices in response, the consequences of the policy responses, other coping mechanisms to deal with high oil prices and price volatility, the roadblocks to reforming pricing policy, and how to deal with them. This report suggests a menu of options for moving away from sectoral subsidies to market-based pricing,

2013

accompanied by an integrated social protection program and complementary policies to reduce consumption through efficiency improvement and fuel diversification.
http://documents.worldbank.org/curated/en/2013/01/18019602/reforming-fuel-pricing-age-100-oil

Drawing a roadmap for oil pricing reform
The path to market-based pricing depends on the starting conditions: the gap between current and market-based price levels, the level of public awareness about the extent of departure from market prices, the degree of market concentration and competition in downstream oil, the subsidy delivery mechanism where subsidies are provided, the robustness of social service delivery, and the perceived credibility of the government. The evidence presented in this paper suggests that pricing reform often does not have a clear end and should instead be viewed as a continuous process of adjustment and search for mechanisms that take into account the country's institutions and political system, and the oil sector's market structure, infrastructure and history.
http://go.worldbank.org/TIKY6LTS60

Petroleum product pricing and complementary policies:
Experience of 65 developing countries since 2009
Unable to cope fully with steadily climbing world oil prices since mid-2009, many of the 65 countries reviewed in this paper have progressed slowly or even reversed course in reforming pricing of petroleum products. End-user prices in July 2012 varied by two orders of magnitude across the countries. More than two-fifths, including some that had only recently adopted automatic pricing mechanisms, froze the prices of gasoline, diesel, or both for months or even years on end during the study period. When the prices were finally adjusted, the increases were sometimes substantial, leading to large-scale protests, partial or full reversals of price adjustments, or softening of pricing reform policy. Governments' attempts to keep domestic prices artificially low – through price control, export or quantity restrictions, or political pressure put on oil companies – have helped curb inflation in the short term, but frequently with serious negative consequences: flourishing black markets, smuggling, fuel adulteration, illegal diversion of subsidy funds, large financial losses suffered by fuel suppliers, deteriorating refining and other infrastructure, and acute fuel shortages causing economy-wide damage.
http://go.worldbank.org/6A2XVLPTY0

Case Studies on Energy Subsidy Reform — Lessons and Implications
This supplement presents country case studies reviewing energy subsidy reform experiences, which are the basis for the reform lessons identified in the main paper. The selection of countries for the case studies reflects the availability of data and of previously documented evidence on country-specific reforms. The 22 country case studies were also chosen to provide cases from all regions and a mix of outcomes from reform. The studies cover 19 countries, including seven from sub-Saharan Africa, two in developing Asia, three in the Middle East and North Africa, four in Latin America and the Caribbean, and three in Central and Eastern Europe and the CIS. The case studies are organized by energy product, with 14 studies of the reform of petroleum product subsidies, seven studies of the reform of electricity subsidies, and a case study of subsidy reform for coal.
http://www.imf.org/external/np/pp/eng/2013/012813a.pdf

The Fiscal and Welfare Impacts of Reforming Fuel Subsidies in India
Rising fuel subsidies have contributed to fiscal pressures in India. A key policy concern regarding subsidy reform is the adverse welfare impact on households, in particular poor households. This paper evaluates the fiscal and welfare implications of fuel subsidy reform in India. Fuel subsidies are found to be badly targeted, with the richest 10 % of households receiving seven times more in benefits than the poorest 10 %.
http://www.imf.org/external/pubs/cat/longres.aspx?sk=40593.0

A Guidebook to Fossil-Fuel Subsidy Reform for Policy-Makers in Southeast Asia
There is no one-size-fits-all strategy for fossil-fuel subsidy reform—but there are a set of planning stages that are generic, along with many common issues, challenges and potential solutions. The

2013	Global Subsidies Initiative (GSI) of the International Institute for Sustainable Development (IISD) has published a guidebook on how governments can formulate an effective reform strategy that will fit their individual objectives and circumstances. It is aimed at policy-makers in Southeast Asia, but much of its guidance could apply to any region. http://www.iisd.org/gsi/fossil-fuel-subsidies/guidebook **A Citizens' Guide to Energy Subsidies in Thailand** Thailand has stabilized and subsidized energy prices for decades in an effort to shield consumers from volatile energy prices and improve access to energy. Despite significant reforms to deregulate parts of its fuels market, Thailand's subsidies for fuel and electricity totalled at least THB 195 billion (USD 6.8 billion) in 2012. Fuel and electricity subsidies are clearly benefiting some consumers, including the poor, who rely on subsidized liquefied petroleum gas (LPG) for cooking and free electricity. http://www.iisd.org/publications/pub.aspx?id=2778 **Energy Subsidy Reform: Lessons and Implications** Energy subsidies have wide-ranging economic consequences. While aimed at protecting consumers, subsidies aggravate fiscal imbalances, crowd-out priority public spending, and depress private investment, including in the energy sector. Subsidies also distort resource allocation by encouraging excessive energy consumption, artificially promoting capital-intensive industries, reducing incentives for investment in renewable energy, and accelerating the depletion of natural resources. http://www.imf.org/external/np/pp/eng/2013/012813.pdf
2012	**Optimal Oil Production and the World Supply of Oil** We study the optimal oil extraction strategy and the value of an oil field using a multiple real option approach. The numerical method is flexible enough to solve a model with several state variables, to discuss the effect of risk aversion, and to take into account uncertainty in the size of reserves. Optimal extraction in the baseline model is found to be volatile. If the oil producer is risk averse, production is more stable, but spare capacity is much higher than what is typically observed. We show that decisions are very sensitive to expectations on the equilibrium oil price using a mean reverting model of the oil price where the equilibrium price is also a random variable. Oil production was cut during the 2008–2009 crisis, and we find that the cut in production was larger for OPEC, for countries facing a lower discount rate, as predicted by the model, and for countries whose governments' finances are less dependent on oil revenues. However, the net present value of a country's oil reserves would be increased significantly (by 100 %, in the most extreme case) if production was cut completely when prices fall below the country's threshold price. If several producers were to adopt such strategies, world oil prices would be higher but more stable. http://www.imf.org/external/pubs/cat/longres.aspx?sk=40169.0 **On the Sources and Consequences of Oil Price Shocks: The Role of Storage** Building on recent work on the role of speculation and inventories in oil markets, we embed a competitive oil storage model within a DSGE model of the U.S. economy. This enables us to formally analyse the impact of a (speculative) storage demand shock and to assess how the effects of various demand and supply shocks change in the presence of oil storage facility. We find that business-cycle driven oil demand shocks are the most important drivers of U.S. oil price fluctuations during 1982–2007. Disregarding the storage facility in the model causes a considerable upward bias in the estimated role of oil supply shocks in driving oil price fluctuations. Our results also confirm that a change in the composition of shocks helps explain the resilience of the macroeconomic environment to the oil price surge after 2003. Finally, speculative storage is shown to have a mitigating or amplifying role depending on the nature of the shock. http://www.imf.org/external/pubs/cat/longres.aspx?sk=40090.0

2012

Technology Roadmap: Fuel Economy of Road Vehicles
This roadmap explores the potential improvement of existing technologies to enhance the average fuel economy of motorised vehicles; the roadmap's vision is to achieve a 30 % to 50 % reduction in fuel use per kilometre from new road vehicles including 2-wheelers, LDV s and HDV s) around the world in 2030, and from the stock of all vehicles on the road by 2050. This achievement would contribute to significant reductions in GHG emissions and oil use, compared to a baseline projection
http://www.iea.org/publications/freepublications/publication/name,31269,en.html

Policy Pathways: Improving the Fuel Economy of Road Vehicles – A policy package
Improving the Fuel Economy of Road Vehicles highlights lessons learned and examples of good practices from countries with experience in implementing fuel economy policies for vehicles. The report, part of the IEA's Policy Pathway series, outlines key steps in planning, implementation, monitoring and evaluation. It complements the IEA Technology Roadmap: Fuel Economy for Road Vehicles, which outlines technical options, potentials, and costs towards improvement in the near, medium and long term.
http://www.iea.org/publications/freepublications/publication/name,31268,en.html

Implementing energy subsidy reforms: An overview of the key issues
Poorly implemented energy subsidies are economically costly to taxpayers and damage the environment. This report describes the emerging lessons that could help policy makers to address implementation challenges, including overcoming political economy and affordability constraints. The analysis provides strong evidence of the success of reforms in reducing the associated fiscal burden. For the selected sample of 20 developing countries, the average energy subsidy recorded in the budget was reduced from 1.8 % in 2004 to 1.3 % of gross domestic product in 2010.
http://go.worldbank.org/5QBSGWMK60

Environmental Tax Reform: Principles from Theory and Practice to Date
This paper recommends a system of upstream taxes on fossil fuels, combined with refunds for downstream emissions capture, to reduce carbon and local pollution emissions. Motor fuel taxes should also account for congestion and other externalities associated with vehicle use, at least until mileage-based taxes are widely introduced. An examination of existing energy/environmental tax systems in Germany, Sweden, Turkey and Vietnam suggests that there is substantial scope for policy reform. This includes harmonizing taxes for pollution content across different fuels and end-users, better aligning tax rates with values for externalities, and scaling back taxes on vehicle ownership and electricity use that are redundant (on environmental grounds) in the presence of more targeted taxes.
http://www.imf.org/external/pubs/cat/longres.aspx?sk=26049.0

Carbon taxation and fiscal consolidation: The potential of carbon pricing to reduce Europe's fiscal deficits
The report highlights the advantages of carbon-energy tax and pricing measures in comparison to indirect and direct taxation for employment and GDP growth. It shows that, Euro for Euro, energy and carbon taxes have a lower negative impact on the economy, consumption and jobs than income tax or VAT. Carbon and energy taxes can raise revenue while leaving the economy is a stronger state to sustain the recovery. Conventional taxes raise revenue, but pose a much greater risk of depressing growth in the process.
http://www.foes.de/pdf/2012-05_CETRiE_Carbon_Pricing_Report_web.pdf

Managing Oil Price Volatility 1 – Lessons from Latin America and the Caribbean
A recent ESMAP-supported study analyses the economic effects of higher and volatile prices on oil-importing countries, with emphasis on the power sector, using examples from Latin America and the Caribbean. The study, which comes in response to the needs of policy makers and energy planners in oil-importing countries to better manage exposure to oil price risk, proposes structural measures designed to reduce oil consumption, while a range of financial instruments are suggested for managing price risk in the short term.
http://www.esmap.org/esmap/node/1953

2012

Managing Oil Price Volatility 2 – Bringing Latin America's Lessons to the Pacific
Pacific island states are some of the most vulnerable countries in the world to oil price shocks. One of the authors of a recent ESMAP-supported report on managing oil price volatility travelled to the Pacific to share the findings and recommendations of the study with officials from island states. He outlined three of the primary options that countries can take to limit their exposure: exploring available renewable power generation options, increasing investments in energy efficiency both on the supply and demand sides, and using financial hedging instruments to mitigate risk.
http://www.esmap.org/esmap/node/1958

A Citizens' Guide to Energy Subsidies in India
The paper provides the latest data on the size of fossil fuel subsidies in India. It also gives an accessible introduction to the impact of these subsidies on economic growth, livelihoods and the environment. India has historically subsidized energy with the objective of protecting its consumers from international price volatility and providing energy access for its citizens, especially the poor. However, energy subsidies place a heavy burden on government budgets, while often failing to reach their targeted beneficiaries.
http://www.iisd.org/gsi/introductions-non-experts/citizens-guide-energy-subsidies-india

Studies Chart a Path to Reduce India's Fossil-Fuel Subsidies
New research charts a path to reduce India's fossil-fuel subsidies while managing the economic and social impacts of higher fuel prices. High levels of subsidies to fossil-fuels (INR 1.4 trillion or USD 27.7 billion in 2011–2012) are placing a heavy burden on public finances, compromising investment in much-needed social and physical infrastructure. Yet reform has been hampered by legitimate concerns over how higher fuel prices will affect the broader economy—potentially disrupting key sectors like transport, industry and agriculture—and the ability of poor citizens to cope with higher prices.
http://www.iisd.org/gsi/fuel-subsidies-india

Indonesia's Fuel Subsidies: An Action Plan for Reform
The report outlines a detailed plan for reducing Indonesia's fuel subsidies. Indonesia spent IDR164.7 trillion (USD 18.1 billion) subsidizing fuel products in 2011, of which IDR 76.5 trillion (USD 8.4 billion) was spent subsidizing gasoline. This is more than the country spent on defence, education, health and social security combined. The report identifies the positions of major civil society organisations and the private sector, based on consultations and surveys. It also provides new analysis of the practical challenges facing the government's plans to develop alternative, gas-based transport fuels in the Java-Bali region. Finally, the report suggests a set of recommended actions for progressing fuel subsidy reform.
http://www.iisd.org/gsi/news/report-provides-action-plan-reforming-fuel-subsidies-indonesia

A Citizens' Guide to Energy Subsidies in Bangladesh
The work is intended to help citizens understand energy subsidies. The guide discusses the size of subsidies to different energy types, the segments of society that benefit the most, and how they affect the country's economy and environment. It also highlights the process of reforming energy subsidies, drawing on the experience of Bangladesh and other developing countries.
http://www.iisd.org/gsi/introductions-non-experts/citizens-guide-energy-subsidies-bangladesh

A Citizens' Guide to Energy Subsidies in Malaysia
This guide discusses the costs and benefits of energy subsidies in Malaysia. The guide discusses the size of subsidies to different energy types, the segments of society that benefit the most, and how subsidies affect the country's economy and environment. It also highlights the process of reforming energy subsidies, drawing on the experience of Malaysia and other countries.
http://www.iisd.org/gsi/resources/citizens-guide-energy-subsidies-malaysia

2012

A Citizens' Guide to Energy Subsidies in Nigeria
This guide provides an accessible introduction to the best available information on the costs and benefits of energy subsidies in Nigeria. It provides an overview of how various types of energy are subsidized; the implications of these subsidies on various aspects of sustainable development; and how they might be or are being reformed, including a summary of lessons learned from international experience.
http://www.iisd.org/gsi/resources/introductions-non-experts/citizens-guide-energy-subsidies-nigeria

Cultivating Governance: Cautionary Tales for Biofuel Policy Reformers
The policy brief analyses the current developments around the emerging U-turns on government support to biofuels internationally. Based on desk research as well as interviews with stakeholders, it seeks to provide guidance for biofuel policy reformers on good governance principles in view of pressures from different interest groups.
http://www.iisd.org/gsi/cultivating-governance-lessons-learned-biofuel-subsidies

Recent Developments in Iran's Energy Subsidy Reforms
In 2010, Iran undertook bold economic reforms to phase out energy subsidies. This policy brief outlines recent developments since the reforms were implemented and sheds some light on how the reforms – once referred to as the country's "grand economic surgery" – have affected Iran.
http://www.iisd.org/gsi/recent-developments-irans-energy-subsidy-reforms

2011

Fuel Price Reform in Bolivia – GIZ
The failure to increase prices for fossil fuels in Bolivia is an important case study of reform strategies for countries with low prices and *ad hoc* pricing measures. Everything that could go wrong, went wrong in the implementation of the price hike in Bolivia in December 2010. This is a classic example for the extreme consequences of *ad hoc* price setting mechanisms. Our paper provides attached a brief evaluation of the failed reform attempt in Bolivia from our perspective.
http://www.giz.de/expertise/downloads/Fachexpertise/giz2011-en-fuel-price-reform-bolivia-december-2010.pdf

Appropriate Response to Rising Fuel Prices
This report investigates the best public policy response to rising fuel prices. This analysis indicates that efforts to reduce fuel price increases may harm consumers and the economy overall by encouraging long-term inefficiencies.
http://www.vtpi.org/fuelprice.pdf

Is Fiscal Policy Procyclical in Developing Oil-Producing Countries?
This paper examines the cyclicality of fiscal behaviour in 28 developing oil-producing countries (OPCs) during 1990–2009. After testing five fiscal measures – government expenditure, consumption, investment, non-oil revenue and non-oil primary balance – and correcting for reverse causality between non-oil output and fiscal variables, the results suggest that all of the five fiscal variables are strongly procyclical in the full sample. Also, the results are not uniform across income groups: expenditure is procyclical in the low and middle-income countries, while it is countercyclical in the high-income countries. Fiscal policy tends to be affected by the external financing constraints in the middle- and high-income groups. However, the quality of institutions and political structure appear to be more significant for the low-income group.
http://www.imf.org/external/pubs/cat/longres.aspx?sk=25063.0

External Sustainability of Oil-Producing Sub-Saharan African Countries
In the extensive empirical work carried out across the IMF on oil-producing sub-Saharan African (SSA) countries, the notion of "sustainability" is often directed toward fiscal policies, and, in particular, views on the "optimal" non-oil primary fiscal deficit. The bulk of this work does not, however, address

external sustainability, which is a concern especially for those SSA oil producers operating under a fixed exchange rate regime. A couple of recent papers have extended the existing methodologies to assess external sustainability for some oil-producing countries but they do not focus on those in sub-Saharan Africa. In this paper, we bolster this empirical work by providing a range of estimates for the long-run external current external account balance for each of the SSA oil-producing countries, based on three widely used methodologies in the IMF. Our research strategy is to apply these models to the eight countries in the sub region – Angola, Cameroon, Chad, Côte d'Ivoire, Equatorial Guinea, Gabon, Nigeria and the Republic of Congo – using similar simplifying assumptions so that we are using the same lens to view how they do and do not differ.
http://www.imf.org/external/pubs/cat/longres.aspx?sk=25197.0

The Chronicles of the Subsidy Reform
On 18 December 2010, Iran increased domestic energy and agricultural prices by up to 20 times, making it the first major oil-exporting country to reduce substantially implicit energy subsidies. This paper reviews the economic and technical issues involved in the planning and early implementation of the reform, including the transfers to households and the public relations campaign that were critical to the success of the reform. It also looks at the reform from a chronological standpoint, in particular in the final phases of the preparation. The paper concludes by an overview of the main challenges for the second phase of the reform.
http://www.imf.org/external/pubs/cat/longres.aspx?sk=25044.0

2011

International Fuel Tax Assessment: An Application to Chile
Gasoline and diesel fuel are heavily taxed in many developed and some emerging and developing countries. Outside of the United States and Europe, however, there has been little attempt to quantify the external costs of vehicle use, so policymakers lack guidance on whether prevailing tax rates are economically efficient. This paper develops a general approach for estimating motor vehicle externalities and hence corrective taxes on gasoline and diesel, based on pooling local data with extrapolations from U.S. evidence. The analysis is illustrated for the case of Chile, though it could be applied to other countries.
http://www.imf.org/external/pubs/cat/longres.aspx?sk=25045.0

Policies to Protect the Poor from the Impact of Food and Energy Price Increases
This paper assesses the effectiveness of policies taken by the Burkinabè authorities to protect the poor from the adverse impact of a combined food and oil price shock in 2008. Estimates of the impact based on household survey data and a price pass-through model suggest that these policies were not well-targeted, benefiting the wealthier groups of the population rather than the poor. More effective policy measures, such as a conditional cash transfer system, which is already being implemented on a pilot basis in urban areas, are discussed as an alternative policy option.
http://www.imf.org/external/pubs/cat/longres.aspx?sk=25182.0

Reducing the impact of price shocks in energy-intensive economies
This paper argues that countries which have higher energy intensity – those that require more energy per unit of economic output – tend to suffer from deeper recessions and are more susceptible to price shocks. In addition, price rises, which cause demand to decrease in the short run and induce investments in efficiency in the longer run, are the major channel for causing reductions in energy intensity. Moreover, energy price subsidization dampens price signals and the pressure that they put on energy intensity, and is therefore associated with higher energy intensity. Price subsidization also involves significant fiscal costs, which have effects on the business cycle, amplifying the magnitude of downturns.
http://www.hks.harvard.edu/m-rcbg/heep/papers/HEEP%20DP%2016%20Matheny.pdf

Energy Security and Sub-Saharan Africa
Over the last decade the topic of energy security has reappeared on global policy agendas. Most analyses of international energy geopolitics examine the interests and behaviour of powerful

2011

energy-importing countries like the US and China. This article begins by examining foreign powers' expanded exploitation of oil and uranium resources in Sub-Saharan Africa.
http://poldev.revues.org/744

Petroleum subsidies in Yemen
Petroleum subsidy reform is increasingly seen as an opportunity for consolidating public finances and fostering sustainable economic development. Yemen, as the country with the lowest per capita income in the group of countries with a high level of energy subsidies, started to reduce subsidies in 2010 and is discussing further options for reform. The results of this paper support a comprehensive petroleum subsidy reform in Yemen. Economic growth is projected to accelerate between 0.1 and 0.8 percentage points annually as a result of reform. Yet, the design of the reform is critically important, especially for the poor. Outcomes of alternative reform scenarios range from an increase in poverty of 2 to 6 percentage points. A promising strategy combines subsidy reduction with direct transfers of 13 800 to 19 700 Yemeni rials annually to the poorest 30 % of households and enhanced public investments. Investments should focus on the utilities, transport, trade, and construction sectors to integrate economic spaces and create the platform for a restructuring of agricultural, industrial and service value chains, which should encourage private sector led and job creating growth in the medium term.
http://www.ifpri.org/publication/petroleum-subsidies-yemen

Mitigation potential of removing fossil fuel subsidies: A general equilibrium
This paper discusses the assumptions, data and both environmental and economic implications of removing these subsidies. It shows that, though removing these subsidies would amount to roughly a seventh of the effort needed to stabilize GHG concentration at a level of 450 ppm or below 2 °C, the full environmental benefit of this policy option can only be achieved if, in parallel, emissions are also capped in OECD countries. Finally, though removing these subsidies qualifies as being a "win-win" option at the global level in terms of environmental and economic benefits, this is not true for all countries/regions. The paper also provides some discussion about the robustness of these results.
http://cleanairinitiative.org/portal/sites/default/files/slocat/MITIGATION_POTENTIAL_OF_REMOVING_FOSSIL_FUEL_SUBSIDIES-A_GENERAL.pdf

2010

Delivering on G-20 Commitments: The Path to Fossil-Fuel Subsidy Reform
This brief summarizes what the G-20 has done to reform fossil-fuel subsidies, up to and including the G-20 Toronto Summit in June 2010. It also outlines a roadmap for the phase out of fossil-fuel subsidies into the future.
http://www.iisd.org/gsi/october-2010-delivering-g-20-commitments-path-fossil-fuel-subsidy-reform

Delivering on The G-20 Commitment to Reform Fossil-Fuel Subsidies: Essential Outcomes From Toronto
This policy brief summarizes G-20 country activity since the Pittsburgh Summit and what needs to be done next. It focuses in particular on the outcomes that need to result from the Toronto Summit on 26–27 June 2010.
http://www.iisd.org/gsi/june-2010-delivering-g-20-commitment-reform-fossil-fuel-subsidies-essential-outcomes-toron

Iran to Cut Oil Subsidies in Energy Reform
In the past three months, the Islamic Republic of Iran has begun eliminating energy subsidies, a move that could transform the way the country's economy works and influence reform in other energy-producing countries, IMF economists say. With the removal of subsidies on oil and gas, domestic demand for energy in Iran is expected to decline, leaving more energy resources available for export. If all goes according to plan, the strategy should serve the dual purpose of generating more revenue for the country and curbing the wasteful use of energy, IMF mission chief Dominique Guillaume and Senior Economist Roman Zytek told the IMF Survey online.
http://www.imf.org/external/pubs/ft/survey/so/2010/int092810a.htm

2010	**Reducing the impact of price shocks in energy-intensive economies** This paper argues that countries which have higher energy intensity – those that require more energy per unit of economic output – tend to suffer from deeper recessions and are more susceptible to price shocks. In addition, price rises, which cause demand to decrease in the short run and induce investments in efficiency in the longer run, are the major channel for causing reductions in energy intensity. Moreover, energy price subsidization dampens price signals and the pressure that they put on energy intensity, and is therefore associated with higher energy intensity. Price subsidization also involves significant fiscal costs, which have effects on the business cycle, amplifying the magnitude of downturns. http://www.hks.harvard.edu/m-rcbg/heep/papers/HEEP%20DP%2016%20Matheny.pdf
2009	**Discussion Paper: Energy Subsidies: Why, When and How?** This report discusses the rationale and performance of energy subsidies, proposes a new tool for subsidy evaluation and design, applies this tool to the analysis of prominent subsidy schemes, and draws conclusions. Energy subsidies typically reduce welfare by creating massive market distortions and significant GDP losses. However, subsidies can make economic sense in specific cases, which we discuss and quantify by applying basic economic theory in illustrative examples. http://www.giz.de/expertise/downloads/gtz2009-en-energy-subsidies-a-think-piece.pdf **Building Fossil-Fuel Subsidy Reform: Have We Got All The Blocks?** This policy brief outlines the building blocks needed to implement a multilateral program to reform fossil-fuel subsidies on a global scale. http://www.iisd.org/gsi/december-2009-cop-15-special-edition-building-fossil-fuel-subsidy-reform-have-we-got-all-b **Car-Scrapping Schemes: An Effective Economic Rescue Policy?** This policy brief assesses the performance of car-scrapping schemes in Germany, Spain, France, the U.K. and the U.S. against their stated policy objectives. http://www.iisd.org/gsi/december-2009-car-scrapping-schemes-effective-economic-rescue-policy **Achieving The G-20 Call to Phase Out Subsidies to Fossil Fuels** Following the September 2009 Pittsburgh Summit, this policy brief explores what G-20 countries need to do to follow through on their commitment to phase out fossil-fuel subsidies. http://www.iisd.org/gsi/october-2009-achieving-g-20-call-phase-out-subsidies-fossil-fuels **What Should Inflation Targeting Countries Do When Oil Prices Rise and Drop Fast?** After a long period of global price stability, in 2008 inflation increased sharply following unprecedented increases in the price of oil and other commodities, notably food. Although inflation remained lower and growth higher in inflation targeting countries than elsewhere, almost everywhere price stability seemed in jeopardy as consumer prices kept surging and central banks struggled to maintain expectations anchored. http://www.imf.org/external/pubs/cat/longres.cfm?sk=22580.0
2008	**Exploit falling markets – Fuel Pricing Mechanisms – GIZ** The current phase of sharply declining crude oil and petroleum product prices offers an opportunity for a critical investigation of the absolute level of pump prices for fuel and the nature and manner of adjustment of the price level. This includes the opportunity to move from *ad hoc* pricing towards formula-based automatic pricing at relatively low political cost. The same applies to the elimination of direct and indirect subsidies which should continue in parallel, and to the imposition of (possibly earmarked) tax on fuel. The discussion paper provides an overview of forms of fuel pricing in the transport sector. http://www.giz.de/expertise/downloads/gtz2008-en-exploit-falling-markets.pdf

2008	**Coping with Oil Price Volatility** Oil prices have been variable since the large price increases of the 1970s and 1980s. The wide price fluctuations in 2007, when daily spot prices for marker crudes nearly doubled between January and November, and fluctuations by more than USD 20 a barrel in early 2008 reinforce the idea that oil prices are volatile. Oil is important in every economy; when its prices are high and volatile, governments feel compelled to intervene. http://www.esmap.org/sites/esmap.org/files/8142008101202_coping_oil_price.pdf
2006	**Coping with Higher Oil Prices** The report covers policy alternatives adopted by developing country governments in response to the increases in world oil prices since the end of 2003. It further analyses what factors have affected the responses and what policy prices have been used by governments to mitigate the effects of higher oil prices on consumers, the government budget and the total demand for oil. http://siteresources.worldbank.org/INTOGMC/Resources/higheroilpricesuneditedjune2006.pdf **Overcoming Vulnerability to Rising Oil Prices: Options for Asia and the Pacific – Fuel to Change Livelihoods, Equity, Empowerment** This report examines the impact of rising oil prices since 2003 on developing countries of the Asia-Pacific region. It represents a set of policy options and priorities that can help reduce national vulnerability to future price rises and protect the interests of the poor. https://unp.un.org/details.aspx?pid=17357
2005	**Saving Oil in a Hurry** This book provides an assessment of the potential oil savings and implementation costs of rapid oil demand restraint measures for transport. This tool box of measures includes new approaches towards telecommuting, car-pooling, transit use and “ecodriving” (fuel efficient driving styles), among other measures. http://www.iea.org/publications/freepublications/publication/savingoil.pdf
2004	**Reducing Oil Consumption in Transport – Combining Three Approaches** This paper provides an analysis of three promising vehicle technology and fuel-related areas for saving oil and reducing CO_2 emissions from transport, and how strong policy measures in these areas could turn transport around by 2030. http://s3.amazonaws.com/zanran_storage/www.iea.org/ContentPages/26165528.pdf

3 General Discussion

2014	**The relationship between fuel prices and traffic pollution levels** A QUT health statistician is urging Australian policy makers to provide more incentives for motorists to use alternative transport. In a paper published in the journal Environment International, Associate Professor Adrian Barnett examined the relationship between petrol and diesel prices in Brisbane and traffic pollution levels in the 16 days after changes in fuel prices. He found higher petrol prices had no effect on pollution levels but higher diesel prices led to significant short-term reductions in carbon monoxide and nitrogen oxides in Brisbane's air. http://phys.org/news/2014-02-relationship-fuel-prices-traffic-pollution.html
2013	**The future of oil – Yesterday's fuel** The dawn of the oil age was fairly recent. Although the stuff was used to waterproof boats in the Middle East 6 000 years ago, extracting it in earnest began only in 1859 after an oil strike in Pennsylvania. The first barrels of crude fetched USD 18 (around USD 450 at today's prices). It was used to make kerosene, the main fuel for artificial lighting after overfishing led to a shortage of whale blubber. http://www.economist.com/news/leaders/21582516-worlds-thirst-oil-could-be-nearing-peak-bad-news-producers-excellent **The global oil industry – Supermajordämmerung** On the surface, things look pretty good for the big, listed oil companies. The world wants more of what they produce than ever before. The price it sells for is high and the profits are rolling in. Exxon Mobil, with a market capitalisation of USD 417 billion, vies with Apple as the world's most valuable listed company. http://www.economist.com/news/briefing/21582522-day-huge-integrated-international-oil-company-drawing **Global Oil Demand Growth – The End Is Nigh** After decades of robust growth in oil demand, the broad consensus in the oil industry and the analytic community is that oil demand will continue its inexorable rise through to 2030. https://ir.citi.com/GvM5rfJy51UU65Qdd%2Fd3Bqv0xQsLGi1ITOos%2B020IG3aCM6B8O75sA-%3D%3D **Effects of Fossil Fuel Developments on Meeting 2 °C Scenarios** Recent years have seen an increasing activity in developing new fossil fuel production capacity. This includes unconventional fossil fuels, such as tar sands and shale gas, fossil fuels from remote locations and fossil fuels with a very large increase in production in the near future. In this Ecofys report by order of Greenpeace International, the impact of such developments on our ability to mitigate climate change is investigated. http://www.ecofys.com/files/files/ecofys-2013-effects-fossil-fuel-developments-two-degrees.pdf
2012	**Fuel to Burn: Now What?** THE reversal of fortune in America's energy supplies in recent years holds the promise of abundant and cheaper fuel, and it could have profound effects on what people drive, domestic manufacturing and America's foreign policy. http://www.nytimes.com/2012/04/11/business/energy-environment/energy-boom-in-us-up-ends-expectations.html?_r=1

2012

Keeping it to themselves – Gulf states not only pump oil; they burn it, too
Saudi Arabia, the only OPEC member with enough spare capacity to make up supply shortfalls, is the best hope of keeping the market stable. The Saudis recently reiterated their pledge to keep the market well supplied as American and European Union sanctions hit Iran. Over time, other producers in the Persian Gulf may be able to pump more. Iraq—and Iran itself—have vast oilfields that could eventually provide markets with millions more barrels a day (b/d). All this is conventional wisdom.
http://www.economist.com/node/21551484

The Differential Effects of Oil Demand and Supply Shocks on the Global Economy
We employ a set of sign restrictions on the generalized impulse responses of a Global VAR model, estimated for 38 countries/regions over the period 1979Q2–2011Q2, to discriminate between supply-driven and demand-driven oil-price shocks and to study the time profile of their macroeconomic effects for different countries. The results indicate that the economic consequences of a supply-driven oil-price shock are very different from those of an oil-demand shock driven by global economic activity, and vary for oil-importing countries compared to energy exporters. While oil importers typically face a long-lived fall in economic activity in response to a supply-driven surge in oil prices, the impact is positive for energy-exporting countries that possess large proven oil/gas reserves. However, in response to an oil-demand disturbance, almost all countries in our sample experience long-run inflationary pressures and a short-run increase in real output.
http://www.imf.org/external/pubs/cat/longres.aspx?sk=40062.0

The Future of Oil: Geology versus Technology
We discuss and reconcile two diametrically opposed views concerning the future of world oil production and prices. The geological view expects that physical constraints will dominate the future evolution of oil output and prices. It is supported by the fact that world oil production has plateaued since 2005 despite historically high prices, and that spare capacity has been near historic lows. The technological view of oil expects that higher oil prices must eventually have a decisive effect on oil output, by encouraging technological solutions. It is supported by the fact that high prices have, since 2003, led to upward revisions in production forecasts based on a purely geological view.
http://www.imf.org/external/pubs/cat/longres.aspx?sk=25884.0

Oil price risks and pump price adjustments
Between 1999 and 2008, world oil prices more than quadrupled in real terms. For oil importers, vulnerability to oil price increases, defined as the share of gross domestic product spent on net oil imports, rose considerably. Considering medians, low-income countries had the highest vulnerability in 2008 and the highest increase in vulnerability between 1999 and 2008. When changes in vulnerability were decomposed into several contributing factors, more than two-thirds of 170 countries studied were found to have offset the increase in the value of oil consumption by reducing the oil intensity of gross domestic product. Oil intensity fell in more than half the countries in every income group and in every region of the world, driven by falling energy intensity and, to a lesser extent, the oil share of energy. This study also examines the degree of pass-through to consumers of increases in world prices of gasoline, diesel, kerosene, and liquefied petroleum gas between January 2009 and January 2012, when oil prices in nominal U.S. dollars more than doubled.
http://go.worldbank.org/SIM8QA2VI0

Should We be Concerned About Competition Between Food and Fuel?
This policy brief discusses the impact of European Union and United States consumption targets on food commodity prices and provides a number of recommendations to help reduce competition between already constrained agricultural markets and increasing biofuel production.
http://www.iisd.org/gsi/should-we-be-concerned-about-competition-between-food-and-fuel

2011

Oil Exporters' Dilemma: How Much to Save and How Much to Invest
Policymakers in oil-exporting countries confront the question of how to allocate oil revenues among consumption, saving and investment in the face of high income volatility. We study this allocation problem in a precautionary saving and investment model under uncertainty. Consistent with data in the 2000s, precautionary saving is sizable and the marginal propensity to consume out of permanent shocks is below one, in stark contrast to the predictions of the perfect foresight model. The optimal investment rate is high if productivity in the tradable sector is high enough.
http://www.imf.org/external/pubs/cat/longres.aspx?sk=25518.0

Automobile use, fuel economy and CO_2 emissions in industrialized countries: Encouraging trends through 2008?
Car use and fuel economy are factors that determine oil demand and carbon dioxide (C02) emissions. Recent data on automobile utilization and fuel economy reveal surprising trends that point to changes in oil demand and C02 emissions. New vehicle and on-road fleet fuel economy have risen in Europe and Japan since the mid 1990s, and in the US since 2003. Combined with a plateau in per capita vehicle use in all countries analysed, these trends indicate that per capita fuel use and resultant tail-pipe C02 emissions have stagnated or even declined.
http://ideas.repec.org/a/eee/trapol/v18y2011i2p358-372.html

Oil-Price Boom and Real Exchange Rate Appreciation: Is There Dutch Disease in the CEMAC?
The paper employs a heuristic comparative approach suggested by Ismail (2009) to search for evidence of Dutch disease in oil-rich countries of the Central African Economic and Monetary Community (CEMAC).
http://www.imf.org/external/pubs/cat/longres.aspx?sk=25362.0

Determinants of Non-oil Growth in the CFA-Zone Oil Producing Countries: How do they Differ?
Non-oil growth in the CFA oil exporting countries has been lacklustre despite their great natural resource wealth. In this paper we study the key determinants of non-oil growth and explore to what extent these countries differ from countries with comparable levels of development that do not depend on non-renewable resources. Using a panel of 38 countries comprising LICs and CFA zone oil exporters, we find that while real exchange rate appreciation negatively impacted growth in all countries over the period 1985–2008, what distinguishes the oil producers of the CFA zone is the failure of public and private investment to spur non-oil growth.
http://www.imf.org/external/pubs/cat/longres.aspx?sk=25285.0

Will Natural Gas Prices Decouple from Oil Prices across the Pond?
We show that US natural gas prices have decoupled from oil prices following substantial institutional and technological changes. We then examine how this interrelationship has evolved in Europe using data for Algeria, one of Europe's key gas suppliers. Taking into account total gas exports and cyclical conditions in partner countries, we find that gas prices remain linked to oil prices, though the nexus has loosened. Both high oil prices and a modest industrial recovery in partner countries have kept gas exports at low levels in recent years, suggesting changing market forces. The paper then shows how such shifts can have important macroeconomic implications for a big gas exporter such as Algeria.
http://www.imf.org/external/pubs/cat/longres.aspx?sk=24980.0

Petroleum Markets in Sub-Saharan Africa
This regional study takes 12 oil-importing countries in Sub-Saharan Africa and asks the following two questions: Does each stage in the supply chain, from import of crude oil or refined products to retail, seem to be efficiently run and are the efficiency gains passed on to end-users? If not, what are the potential causes and possible means of remedying the problems?
http://siteresources.worldbank.org/INTOGMC/Resources/336099-1158588096604/eifd15_ssa_oil_markets.pdf

2011

Transport Fuel Prices in Sub-Saharan Africa: Explanation, impact and policies
Why look at SSA transport fuel prices now? How do SSA transport fuel prices compare with those in other regions? Variation in transport fuel prices between SSA counties. The structure of transport fuel prices in SSA countries. What can be done to reduce high prices or their impact?
http://siteresources.worldbank.org/INTTRANSPORT/Resources/336291-1297096897336/7715763-1297096955872/Presentation-Carruthers.pdf

Burning Oil to Keep Cool: The Hidden Energy Crisis in Saudi Arabia
Saudi Arabia's place in the world oil market is threatened by unrestrained domestic fuel consumption. In an economy dominated by fossil fuels and dependent on the export of oil, current patterns of energy demand are not only wasting valuable resources and causing excessive pollution, but also rendering the country vulnerable to economic and social crises. This report explains why the need for change is urgent, and what options and challenges the Saudi government faces in trying to address the politically sensitive issue of domestic energy prices.
http://www.chathamhouse.org/publications/papers/view/180825

Oil Prices, External Income and Growth: Lessons from Jordan
This paper extends the long-run growth model of Esfahani *et al.*, (2009) to a labour exporting country that receives large inflows of external income—the sum of remittances, FDI and general government transfers—from major oil-exporting economies. The theoretical model predicts real oil prices to be one of the main long-run drivers of real output. The empirical analysis of the paper confirms the hypothesis that a large share of Jordan's output volatility can be associated with fluctuations in net income received from abroad. External factors, however, cannot be relied upon to provide similar growth stimuli in the future, and therefore it will be important to diversify the sources of growth in order to achieve a high and sustained level of income.
http://www.imf.org/external/pubs/cat/longres.aspx?sk=25428.0

Oil Spill(over)s: Linkages in Petroleum Product Pricing Policies in West African Countries
This paper addresses a number of issues regarding petroleum product pricing in Western Africa emphasizing international spill overs. We use panel unit root rests and long-run modelling based on vector error correction models to assess links and convergence in petroleum product prices across countries. Our results indicate that in general over the long-run there is convergence in prices across the countries.
http://www.imf.org/external/pubs/cat/longres.aspx?sk=24826.0

2010

The Distributional Effects of Oil Price Changes on Household Income: Evidence from Mali
Many net oil-importing developing countries, particularly African economies, have faced economic difficulties with high oil price increases. As a case study, this paper assesses the distributional effects of a rise in various petroleum product prices in Mali using a standard computable general equilibrium model. The results suggest that rising diesel prices primarily affect richer households, while the poorest ones tend to suffer more from higher kerosene and gasoline prices. Overall, the impact of fuel prices on household budgets shows a U-shaped relationship with expenditure per capita. Regardless of the oil product considered, high-income households benefit disproportionately from oil price subsidies. This suggests that petroleum price subsidies are ineffective in protecting the income of poor households compared with a targeted subsidy.
http://econpapers.repec.org/article/oupjafrec/v_3a19_3ay_3a2010_3ai_3a2_3ap_3a205-236.htm

Retail Fuel Price Response to Oil Price Shocks in EU Countries
There is a widely held belief that retail fuel prices rise very quickly following an increase in international oil prices but fall slowly when oil prices decrease. This study uses data from European Union countries to investigate the response of retail gasoline prices to changes in the world oil price. The findings indicate significant variation in the adjustment mechanism across countries. Fluctuations in

2010	the international price of oil are transported to local prices with some delay but evidence of asymmetric adjustment is fairly weak. http://www.ucy.ac.cy/erc/documents/Clerides_Full_Text.010.pdf
2009	**Do speculators drive crude oil prices? Dispersion in beliefs as a price determinant** Do speculators drive crude oil prices? Dispersion in beliefs as a price determinant Before Gary Gensler became its chairman, the US Commodity Futures Trading Commission (CFTC) held the view that speculators had little influence on the price of crude oil, but since then a reassessment has been taking place. This article measures speculator activity on the basis of variables contained in the weekly CFTC market reports and analyses speculator influence on crude oil prices and crude oil price volatility using econometric procedures. http://www.dbresearch.com/MAIL/DBR_INTERNET_EN-PROD/PROD0000000000251256.pdf
2008	**Understanding Crude Oil Prices** This paper examines the factors responsible for changes in crude oil prices. The paper reviews the statistical behaviour of oil prices, relates these to the predictions of theory, and looks in detail at key features of petroleum demand and supply. Topics discussed include the role of commodity speculation, OPEC and resource depletion. The paper concludes that although scarcity rent made a negligible contribution to the price of oil in 1997, it could now begin to play a role. http://www.economicsclimatechange.com/2008/11/understanding-crude-oil-prices.html **Food and Fuel Prices-Recent Developments, Macroeconomic Impact and Policy Responses – An Update** These findings reinforce the importance of adopting appropriate policies to maintain macroeconomic stability while protecting the poor. http://ebookbrowsee.net/0806-imf-food-and-fuel-prices-recent-developments-macroeconomic-impact-and-policy-responses-pdf-d396449151 **The Balance of Payments Impact of the Food and Fuel Price Shocks on Low-Income African Countries: A Country-by-Country Assessment** This note discusses the implications of the price shocks for the balance of payments of low-income countries in sub-Saharan Africa. To this end, the note identifies a list of 18 countries in the region that are especially hard-hit and that consequently face a pressing need for additional balance of payments and budget support. http://www.imf.org/external/pp/longres.aspx?id=4267Do **High Oil Prices Matter? – Evidence on the Mobility Behaviour of German Households** Focusing on travel survey data from Germany, this paper investigates the determinants of automobile travel, with the specific aim of quantifying the effects of fuel prices and fuel economy. http://www.economicsclimatechange.com/2008/10/do-high-oil-prices-matter-evidence-on.html **How Do Gasoline Prices Affect Fleet Fuel Economy?** Exploiting a rich data set of passenger vehicle registrations in twenty U.S. metropolitan statistical areas from 1997 to 2005, the authors examine the effects of gasoline prices on the automotive fleet's composition. They find that high gasoline prices affect fleet fuel economy through two channels: (1) shifting new auto purchases towards more fuel-efficient vehicles, and (2) speeding the scrappage of older, less fuel-efficient used vehicles. http://www.economicsclimatechange.com/2008/11/how-do-gasoline-prices-affect-fleet.html

2005	**The Challenge of Higher Oil Prices** The research paper gives helpful advice which way to choose in adjusting to higher oil prices in Asia. It further elaborates on the question why oil prices are so high and it proposes policy recommendations. https://www.oxfordeconomics.com/publication/open/222575 **The Impact of Higher Oil Prices on Low Income Countries and the Poor** This note is designed to provide a brief overview on the impact of current oil price increases on low income countries and poorer households. https://www.esmap.org/sites/esmap.org/files/KES01_The%20Impact%20of%20Higher%20Oil%20Prices%20on%20Low%20Income%20Countries%20and%20the%20Poor.pdf **Ghana: Evaluating the Fiscal and Social Costs of Increases in Domestic Fuel Prices** This paper reflects the analysis of the fiscal and social implications of domestic fuel price increases in Ghana with specific focus on resulting impacts and distributions issues. The work further identifies alternative approaches to mitigate the adverse effects of price increases on poor households and actual government policy response. http://siteresources.worldbank.org/INTPSIA/Resources/490023-1120841262639/ch11_ghana.pdf **The Structure of the Oil Market and Causes of High Prices** This note examines how crude oil, futures and petroleum product markets interact to determine market outcomes. https://www.imf.org/external/np/pp/eng/2005/092105o.htm
2004	**Analysis of the Impact of High Oil Prices on the Global Economy** This paper reviews how oil prices affect the macro-economy and assesses the extent to which the economies of OECD and developing countries remain vulnerable to a sustained period of higher oil prices. It summarises the findings of a quantitative exercise carried out by the IEA in collaboration with the OECD Economics Department and with the assistance of the International Monetary Fund (IMF) Research Department. http://www.iea.org/textbase/npsum/high_oil04sum.pdf

4 Statistical Data

International Fuel Prices 2012/2013
GIZ – Data preview
http://www.giz.de/expertise/downloads/Fachexpertise/giz2013-en-ifp2013.pdf

Key World Energy Statistics 2013
The IEA produced its first handy, pocket-sized summary of key energy data in 1997 and every year since then it has been more and more successful.
http://www.iea.org/publications/freepublications/publication/name,31287,en.html

Energy Outlook 2030
The outlook highlights the growing role of developing economies in global energy consumption, and the increasing share of non-fossil fuels in global energy supply. It emphasizes the central role markets and well-designed policy can play to meet the dual challenge of solving the energy needs of billions of people who aspire to better lifestyles, and doing so in a way that is sustainable and secure. It also notes the uncertainties attached to any long term projection. The discipline of building a numerical projection sharpens our thinking, but the precise numbers are less important than the underlying story of the challenges we all face and the choices we make in producing and consuming energy.
http://www.bp.com/sectiongenericarticle800.do?categoryId=9037134&contentId=7068677

World Energy Outlook 2013
The World Energy Outlook is recognised as the most authoritative source of strategic analysis of global energy markets. It is regularly used as input to the development of government policies and business strategies and raises public awareness of the key energy and environmental challenges the world is facing.
http://www.worldenergyoutlook.org/publications/weo-2013

European Commission; Energy Prices and Costs
'Energy Prices and Costs Report,' seeks to inform policy makers on recent energy price increases in Europe and their impact on energy consumers. The report describes the drivers for rising retail energy prices, with a focus on electricity and gas, and analyses how their prices have evolved in recent years in different EU member States.
http://ec.europa.eu/energy/doc/2030/20140122_swd_prices.pdf

OECD: Budgetary support and tax expenditures
The importance of reforming policies supporting fossil fuels was explicitly recognised in the OECD's June 2009 Declaration on Green Growth, in which 34 countries vowed to "encourage domestic policy reform, with the aim of avoiding or removing environmentally harmful policies that might thwart green growth, such as subsidies: to fossil fuel consumption or production that increase greenhouse gas emissions…". To further support those initiatives, the OECD and the IEA have been compiling estimates of subsidies and other support measures for a large number of countries. This site brings together the OECD inventory of estimated budgetary support and tax expenditures relating to the production or use of fossil fuels in its member economies, and IEA data on consumption subsidies, primarily in developing and emerging economies.
http://www.oecd.org/site/0,3407,en_21571361_48776931_1_1_1_1_1,00.html

Excise Duty Tables Part II – Energy products and Electricity
In collaboration with the Member States, the European Commission has established the "EXCISE DUTY TABLES" showing rates in force in the Member States of the European Union. This publication aims to provide up-to-date information on Member States main excise duty rates as they apply to typical products. The information is supplied by the respective Member States. The Commission cannot be held responsible for its accuracy or completeness, neither does its publication imply and endorsement by the Commission of those Member States' legal provisions. It is intended that Member States will regularly communicate to the Commission all modifications of the rates covered by this publication and that revised editions of the tables will be published twice a year.
http://ec.europa.eu/taxation_customs/resources/documents/taxation/excise_duties/energy_products/rates/excise_duties-part_ii_energy_products_en.pdf

Motor Vehicle Taxation: EU Summary, 2012
Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, United Kingdom
https://www.cesifo-group.de/de/ifoHome/facts/DICE/Infrastructure/Transportation/Road-Transport/Mot-veh-tax-EU_12.html

Overview of CO_2-based motor vehicle taxes in the EU
CO_2 taxation is now well established across the European Union. 20 EU member states currently apply some form of CO_2 tax to the registration and/or ownership of passenger cars, up from 17 in 2010.
http://www.acea.be/uploads/publications/CO_2_Tax_overview_2014.pdf

International Gasoline Rankings – TOP 100 SULFUR
The IFQC has ranked the top 100 countries based on sulphur limits in gasoline. The following countries were ranked based on the order of the following criteria: maximum allowable sulphur limits in national standards, sulphur limits in local/regional standards (such as specifications for cities/states) and by year of implementation.
http://www.ifqc.org/NM_Top5.aspx

2013 Global oil and gas tax guide
This guide summarizes the oil and gas corporate tax regimes in 74 countries.
http://www.ey.com/GL/en/Services/Tax/Global-oil-and-gas-tax-guide---Country-list

Clean Cities Alternative Fuel Price Report
Clean Cities Alternative Fuel Price Report is a quarterly report designed to keep you up to date on the prices of alternative fuels and conventional fuels in the U.S.
http://www.afdc.energy.gov/uploads/publication/alternative_fuel_price_report_january_2014.pdf

5 About Us

About GIZ

GIZ's purpose is to promote international cooperation for sustainable development and education work.

As a 100 % federally owned, public-benefit enterprise, we support the German Government in achieving its objectives in the field of international cooperation for sustainable development.

GIZ operates throughout Germany and in more than 130 countries worldwide. Our registered offices are in Bonn and Eschborn. We have more than 16 000 staff across the globe, some 70 % of whom are employed locally as national personnel. There are also 890 development workers working for GIZ. More here: www.giz.de/en

About our work on International Fuel Prices

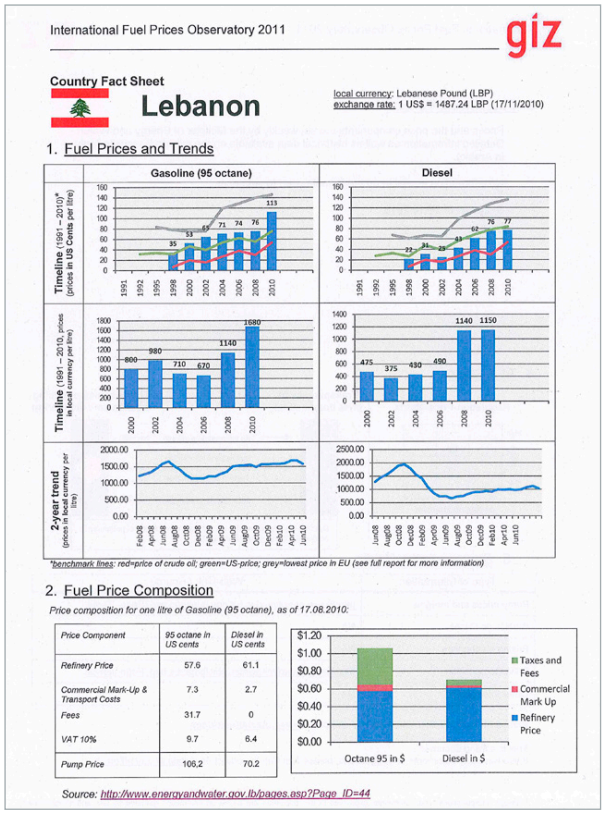
Since 1998, GIZ has been providing comprehensive data on fuel taxation in developing countries, thus making a valuable contribution to debate on the issue. Decision-makers in partner countries benefit from access to essential information on pricing, potential income from fuel taxes and reform processes 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 further explores recent trends and case studies on fuel prices and fuel pricing policies in developing countries. More here: www.giz.de/fuelprices

About our Factsheets "International Fuel Prices Observatory"

Our "International Fuel Prices Observatory" factsheets offer compact information on:

- Price in USD and local currency (some since 1991);
- Price composition (production costs, taxes, fees, margins, etc.);
- Pricing policy;
- Transparency-traffic-signal on price composition and pricing policy;
- Related Links.



More than 120 factsheets on: https://energypedia.info/index.php/International_Fuel_Prices

More information

- Sustainable Urban Transport (SUTP): www.sutp.org
- GIZ Transport and Mobility: www.giz.de/transport
- Extensive SUTP Photo Database: http://www.flickr.com/photos/sustainabletransport
- Capacity Building on Sustainable Urban Transport (CAPSUT): www.capsut.org
- Facebook: https://www.facebook.com/sustainableurbantransportproject
- Follow us on twitter: https://twitter.com/_SUTP
- Quick access to GIZ Transport & Mobility sources http://www.sutp.org/images/compass/compass_links03.pdf

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