TESTIMONY

Fueling the Climate Crisis: Examining Big Oil's Prices, Profits, and Pledges House Committee on Oversight and Reform Isabella Weber, University of Massachusetts Amherst

September 15, 2022

Chairwoman Maloney and members of the Committee. My name is Isabella Weber. I am Assistant Professor of Economics at the University of Massachusetts Amherst and currently a fellow at the Berggruen Institute and an Associate in Research at Harvard's Fairbank Center. My research focuses on inflation in episodes of rapid structural shifts. This has been the main focus of my award-winning recent book *How China Escaped Shock Therapy*.¹ The COVID-19 pandemic, the war in Ukraine and climate disaster all represent such rapid structural shifts, and I lead a research project on the current inflation funded by the Groundwork Collaborative. We examine the role of systemically important industries in this context, such as the fossil fuel industry, and we are currently completing a study with colleagues that assesses which industries represent points of vulnerability for monetary stability in the United States. With the lead-author Dr. Gregor Semieniuk, we are also completing a study that assesses who profits from the fossil fuel price hikes using a network model of global firms that has previously been published in *Nature Climate Change*. My testimony will draw on results from this research.

We have witnessed a profit and price explosion in the fossil fuel industry that started in 2021 and has increased in the wake of the war in Ukraine. These excess profits have unleashed a redistribution of incomes and raises the question of who is reaping the benefits and who is paying the bill. In my testimony, I will address this question and illustrate far-ranging implications for macroeconomic stability and our ability to mitigate climate change. In short:

Among the winners are

- fossil fuel companies;
- high wealth households holding shares in fossil fuel companies, Wall Street and Asset Managers;

¹ Weber, Isabella M. (2021): How China Escaped Shock Therapy: The Market Reform Debate. New York, Oxon: Routledge.

• and companies that use rising costs as a pretext to increase prices and profits.

Among the losers are

- poor households, Black and Brown and Latinx communities who are also the main victims of climate change in the United States;
- governments that have seen their budgets burdened by high energy prices; and
- firms that depend on fossil fuels as inputs and have seen their costs rise sharply and their profits fall.

The impact of exploding fossil fuel prices goes beyond the entities most directly affected. Energy price hikes have also played an important role in the return of inflation and have rendered profitability somewhat arbitrary. This presents a major risk for macroeconomic stability. Finally, if fossil fuel profits explode, it becomes more attractive to hold assets in this industry. This can expand and strengthen the groups with vested interests in the fossil fuel industry, which in turn creates a political challenge for climate change mitigation. I will conclude by recommending policies for direct stabilization of fossil fuel prices.

Let me develop these points.

Price and profit explosions in the fossil fuel industry: The best year on record for American oil giants

Oil corporations have reaped record profits in the second quarter of 2022, while the war in Ukraine created global turmoil on commodity markets. With a team of researchers, we we tracked the ownership relations amongst millions of companies to estimate total profits in the US fossil fuel industry in the second quarter of 2022; our model was recently been published in *Nature Climate Change*. We find that U.S. companies have made \$84.5 billion in profits in the second quarter of 2022 alone.² This is a net increase of \$51.4 billion compared to the profits in the same quarter a year earlier. In other words profits have increased by a factor of 2.5 or by 155 per cent. Our method allows us to also estimate the amount of profits that belong to U.S. entities through the financial ownership of oil assets globally. We find that an additional net transfer of \$8.8 billion from publicly traded companies abroad flowed into U.S. financial institutions and U.S. shareholders holding ownership in these companies.³ Quarterly profits

² This refers to U.S. companies in 'oil and gas' and 'oil and gas services' sectors classified by Refinitiv, which tracks publicly traded companies.

³ This and the following calculations on ownership attribution are from Semieniuk, G., I. Weber, I. Weaver, E. Wasner, B. Braun, P. Holden, P. Salas, N. Edwards, J. Mercure. 2022. Who profits from energy price inflation in the United States? Manuscript in preparation; which is based on previous work modeling ownership in Semieniuk, G., P. Holden, J. Mercure, P. Salas, H. Pollitt, K. Jobson, P. Vercoulen, U. Chewpreecha, N. Edwards, J. Viñuales. 2022.

from publicly traded companies alone thus total \$93.3 billion for US financial institutions and persons. This amounts to 2.2% of the total disposable income of all Americans that quarter. To illustrate the magnitude of this number: the total amount of profits is close to 50% more than the federal government spending of \$64.5 billion on Natural Resources and the Environment for all of 2022.⁴

The two largest U.S. oil firms, ExxonMobil and Chevron, have reported the highest profits in their long history. Already in 2021, the two oil giants were more than compensated for the dip in earnings during the pandemic shutdowns in 2020. Chevron earned \$15.6 billion and ExxonMobil earned \$23 billion in net income in 2021. Chevron's CEO, Mike Wirth, informed his shareholders in the fourth quarter earnings call of 2021 that "the last two quarters have been the best two quarters the company has ever seen. And last year was 25% higher than the best year in our history."⁵ In the first half of 2022, both companies further increased their profits, earning more in net income than in the whole year of 2021: ExxonMobil and Chevron earned \$23.3 and \$17.9 billion, respectively. Both broke previous records for quarterly earnings. Taken together, Exxon and Chevron earned about one third more in profits in the first six months of 2022 than the federal government is spending on science and technology for all of 2022.⁶

It is true that prices for crude oil reached levels not seen for about a decade, breaking the \$120 per barrel mark in June 2022 before declining back to the levels seen earlier this year. But unlike profits, prices did not reach record levels. The CEOs of Chevron and ExxonMobil point to low production costs as one of the factors that has raised margins. In the earnings call in the fourth quarter of 2021, ExxonMobil reported that the breakeven price is down to \$41 per barrel of crude oil, and it sees potential to drive this down further to \$35. This means that, with a market price of around \$100 per barrel as we have seen this year, about \$60 are profits before taxes.

Stranded fossil-fuel assets translate to major losses for investors in advanced economies. *Nature Climate Change*, *12*(6), 532–538. https://doi.org/10.1038/s41558-022-01356-y

⁴ USAspending.gov. (n.d.). Retrieved September 13, 2022, from

https://www.usaspending.gov/explorer/budget_function

⁵ Motley Fool Transcribing (2022, January 28). Chevron (CVX) Q4 2021 Earnings Call Transcript. Retrieved September 13, 2022, from https://www.fool.com/earnings/call-transcripts/2022/01/28/chevron-cvx-q4-2021-earnings-call-transcript/

⁶ USAspending.gov. (n.d.). Retrieved September 13, 2022, from

https://www.usaspending.gov/explorer/budget_function

Higher-cost oil wells were shut down during the pandemic and have not been fully reopened. US output volumes also have not yet returned to pre-pandemic levels.⁷ Global supply has been additionally tightened and uncertain due to the war in Ukraine and sanctions on Russia. So, simply put, less oil is produced at lower costs and sold at exploding prices – where the low supply volume helps to keep prices up. While there are technical challenges to reopen oil wells and refineries, there are no strong incentives for oil corporations to fully reopen if they can generate unprecedented profits with lower output volumes. Who wants to produce more to earn less? In the parlance of Darren Woods, Chairman of the Board of CEOs at Exxon, we are in "this period of time where you've taken a lot of capacity out and new capacity that was planned or in progress has been deferred and delayed. And so, we've got a period with lower supply. And then, of course, as demand has picked up, that has led to this very tight market and the higher margins that we're seeing."⁸

America's largest oil corporations are in no rush to expand production and are taking a "disciplined approach to investments" in the words of Woods (ExxonMobil).⁹ Chevron and other oil corporations are pursuing the same low level of investment in production capacity approach. Chevron's CEO Wirth told shareholders in January 2022 that "in just two years, capex [capital expenditure] was reduced by almost half." The so-called "disciplined approach" has enabled large oil corporations like Exxon and Chevron to use their record cash flows to pay out dividends and buy back shares.¹⁰ ExxonMobil expects "this will be a few year price environment."¹¹ The staggering profit numbers and buybacks have been rewarded on the stock market. The stock price of ExxonMobil and Chevron has increased by 59 per cent and Chevron by 38 per cent, respectively, in the course of this year.¹²

 ⁷ Rapier, R. (2022, March 11). What is holding back U.S. oil production? Forbes. Retrieved September 13, 2022, from https://www.forbes.com/sites/rrapier/2022/03/11/what-is-holding-back-us-oil-production/?sh=58494b26b6f6
⁸ Motley Fool Transcribing (2022, April 29). ExxonMobil (XOM) Q1 2022 Earnings Call Transcript. Retrieved September 13, 2022, from https://www.fool.com/earnings/call-transcripts/2022/04/29/exxonmobil-xom-q1-2022-earnings-call-transcript/

⁹ Motley Fool Transcribing (2022, February 1). ExxonMobil (XOM) Q4 2021 Earnings Call Transcript. Retrieved September 13, 2022, from https://www.fool.com/earnings/call-transcripts/2022/02/01/exxonmobil-xom-q4-2021-earnings-call-transcript/

¹⁰ Crowley, Kevin (2022, July 30). Revenge of Old World Economy as Big Oil's Cash Flow Rivals Tech. Retrieved September 13, 2022, from https://www.bloomberg.com/news/articles/2022-07-30/revenge-of-old-world-economy-as-big-oil-s-cash-flow-rivals-tech

¹¹ Motley Fool Transcribing (2022, July 29). ExxonMobil (XOM) Q2 2022 Earnings Call Transcript. Retrieved September 13, 2022, from https://www.fool.com/earnings/call-transcripts/2022/07/29/exxonmobil-xom-q2-2022-earnings-call-transcript/

¹² Bloomberg (2022, September 13). ExxonMobil Corp Company Info. Retrieved September 13, 2022, <u>https://www.bloomberg.com/quote/XOM:US</u>

Bloomberg (2022, September 13). Chevron Corp Company Info. Retrieved September 13, 2022, https://www.bloomberg.com/quote/CVX:US

This raises the question of who are the beneficiaries of low capital investments and high prices are.

The top 1%, Wall Street and Asset Managers are beneficiaries of the profit explosion in fossil fuels

The same ownership network that allows us to trace global fossil fuel profits (see previous section) can also be used to identify the beneficiaries of the profit explosion in fossil fuels in the US.

One key group of beneficiaries are Wall Street firms and asset managers. Let's consider the record-breaking profits in the second quarter of 2022. Of the \$93.3 billion dollars in US profits, \$52.8 billion accrue to funds invested by asset managers. The second largest share is \$37 billion that go to individuals who directly hold stocks in these companies. The remaining \$3.5 billion in profits flows through financial intermediaries such as banks and insurance companies that invest their own equity in oil and gas companies. The ultimate beneficiaries of fund managers' and financial companies' investments are individuals in some cases via further intermediation such as pension funds. For the asset management share, 5% of the beneficial owners are foreign entities.¹³ This leaves \$90.2 billion in total quarterly profits for domestic distribution.

The wealthiest households in the US are the most important ultimate beneficiaries. The top 1% received \$48.8 billion in fossil fuel profits in the second quarter of 2022 alone – that is 53.7% of the total domestic fossil fuel profits.¹⁴ The next 9% received \$31.6 billion, or 35%. We estimate that, for the top 1%, the fossil fuel profits alone reduced the inflation burden by 4.2 percentage points, since the increase in income from higher fossil fuel profits offsets the nominal loss by inflation. For the next 9%, inflation is still offset by 1.7 percentage points.

Fossil fuel price are a systemic inflation risk

Fossil fuel prices impact consumer inflation both in a direct way by being major items in household's consumption baskets, as well as indirectly since oil and gas are ubiquitous inputs into a wide range of other industries. This means that consumers end up not only paying exploding prices for gas and heating, but also for the majority of other goods where input costs

¹³ federalreserve.gov. (n.d.). Retrieved September 13, 2022, from

https://www.federalreserve.gov/apps/fof/DisplayTable.aspx?t=1.224

¹⁴ This assumes the same distribution of corporate equity and mutual fund ownership as in the Fed's Distributional Financial Accounts.

have increased.¹⁵ With a team of researchers, we have used input-output modeling to assess the impact on overall consumer price inflation (CPI) from price shocks across all industries as they occurred in 2021-2022.¹⁶ We find that the price explosion in "Petroleum and coal products" has the largest impact on consumer price inflation compared to all other sectors of the US economy by a very wide margin. This is the case when we model the price shocks in this sector using data for the annual price increase of 70.25 % in the first quarter of 2021 and the renewed increase of 56.55 % a year later in the first quarter of 2022, but also when we simulate the impact on CPI using the average price volatility in this sector in 2009-2019 of 21.34 %. Simply put, fossil fuels present a systemic inflation risk for the U.S. economy given its current structures: This is the case because of the high price volatility in fossil fuels, their ubiquity in production processes across a wide-range of sectors and their weight in consumer baskets. This systemic risk has materialized in the post-shutdown inflation.

The victims of climate change are also hit hardest by fossil fuel price hikes

While all consumers are hit by fossil fuel price hikes, the burden of this systemic inflation risk is shared very unequally across income groups and communities. The same communities that are hit hardest by climate change suffer most under fossil fuel price hikes. Household energy burdens—the percentage of household income spent on energy bills—are disproportionally higher for low-income, Black, Hispanic, Native American, and older adult households.¹⁷ As a result, households in these communities are much more likely to face energy insecurity, in other words they are at a higher risk to be unable to meet their basic energy needs.¹⁸ Energy insecurity and higher energy burdens are a result of lower incomes and the racial wealth gap that deprives members of this community of the resources needed to adapt to climate change, as well as of racial segregation in the housing market.¹⁹ 52 percent of Black

¹⁵ This assumes that firms can pass-on costs to consumers which has been the case in many sectors.

¹⁶ Weber, Isabella M., Jesus L. Jauregui, Lucas Teixeira, Luiza (2022). Inflation in times of overlapping emergencies: Systemically significant prices from an input-output perspective. University of Massachusetts Amherst, Department of Economics Working Paper (forthcoming).

¹⁷ Drehobl, A., L. Ross, and R. Ayala (2020). *How High are Household Energy Burdens?* Washington, DC: American Council for an Energy-Efficient Economy. Retrieved September 13, 2022, from https://www.aceee.org/research-report/u2006

¹⁸ Graff, Michelle, Sanya Carley, David M. Konisky, Trevor Memmott (2021). Which households are energy insecure? An empirical analysis of race, housing conditions, and energy burdens in the United States, Energy Research & Social Science, Volume 79. Retrieved September 13, 2022, from 102144 https://www.sciencedirect.com/science/article/abs/pii/S2214629621002371

¹⁹ Lewis, Jamal, Diana Hernández, Arline Geronimus (2019). Energy Efficiency as Energy Justice: Addressing Racial Inequities through Investments in People and Places, Energy Efficiency, 2019 Mar, Volume 13. Retrieved September 13, 2022, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7966972/

households reported in a 2020 survey that they are experiencing energy insecurity, compared with 27 percent across all households.²⁰

For low-income, Black, Hispanic, Native American, and older adults households that were already energy insecure, the present fossil fuel price explosion constituted a tipping point into poverty. Households that were at the brink of energy insecurity before the present crisis now face difficulties to cover their basic energy needs. These same low-income communities and communities of color also bear the brunt of the damage to human health by industrial air pollution,²¹ and they suffer the greatest harm from climate change.²² Now they are the prime victims of the fossil fuel price and profit explosion.²³

The same communities that are already triple-hit by the consequences of the fossil-fuel intensive economy as victims of pollution, of climate change and now also fossil fuel price explosions, stand to be hit once more by Fed interest rate hikes. When economists like Larry Summers argue that the only way to fight inflation is to increase unemployment through further interest rate hikes, they tacitly recommend double-digit unemployment for Black workers. Workers from other racial and ethnic minorities—along with those with other barriers to employment, such as disabilities, criminal records or low levels of education— would also be prescribed more than 5% unemployment.²⁴ This is an important reason for an alternative approach to fighting inflation that combines direct price stabilization for essentials like energy with investments that stabilize supply.²⁵

https://rooseveltinstitute.org/publications/energy-price-stability/

²⁰ U.S. Energy Information Administration (2020). Residential Energy Consumption Survey. Retrieved September 13, 2022, from https://www.eia.gov/consumption/residential/data/2020/

²¹ Ash, Michael, James Boyce (2018). Racial disparities in pollution exposure and employment at US industrial facilities, Proceedings of the National Academy of Sciences, Volume 115, Retrieved September 13, 2022, from https://www.researchgate.net/publication/328008175_Racial_disparities_in_pollution_exposure_and_employment _at_US_industrial_facilities

²² Morello Frosch, Rachel, Manuel Pastor, Jim Sadd, Seth Shonkoff (2018). The Climate Gap: Inequalities in How Climate Change Hurts Americans and How to Close the Gap. In: Planning for Climate Change, eds. lisabeth M. Hamin Infield, Yaser Abunnasr, Robert L. Ryan, New York, Oxon. Routledge.

²³ Melodia, Lauren, Kristina Karlsson (2022). Energy Price Stability: The Peril of Fossil Fuels and the Promise of Renewables, Roosevelt Institute Policy Brief. Retrieved September 13, 2022, from

²⁴ Smith, Talmon J., Ben Casselman (2022, August 24). What Will Happen to Black Workers' Gains if There's a Recession? The New York Times, Retrieved September 13, 2022, from

https://www.nytimes.com/2022/08/24/business/economy/black-workers-recession.html ²⁵ Weber, Isabella M. (2021, December 29). Could strategic price controls help fight inflation? The Guardian, Retrieved September 13, 2022, from

https://www.theguardian.com/business/commentisfree/2021/dec/29/inflation-price-controls-time-we-use-it Jacobs, Meg, Isabella M. Weber (2022, August 9). The way to fight inflation without rising interest rates and a recession, Washington Post. Retrieved September 13, 2022, from https://www.washingtonpost.com/made-byhistory/2022/08/09/way-fight-inflation-without-rising-interest-ratesrecession/?utm_campaign=wp_opinions&utm_source=twitter&utm_medium=social

Large employers, small businesses and governments are squeezed by energy costs

The profit bonanza for fossil fuels creates a heavy burden on governments and large employers. State and local governments are the second most important users of petroleum and coal products according to the BEA input-output table after the fossil fuel industry. Transportation and defense in particular are highly energy intensive and large budget items. This means that the fossil fuel price explosion squeezes government budgets across the country, taking away financial resources that are urgently needed elsewhere. This also means that ultimately taxpayers are picking up a share of the bill for exploded profits. Other industries that are top users of petroleum and coal products are construction, chemicals, transportation and farms. The cost increase in these industries has the potential to exacerbate the U.S. housing crisis;²⁶ added cost pressure to the sharply increased freight rates of the post-shutdown economy; and by increasing costs for farms—both directly as well as indirectly via fertilizers and pesticides produced by the chemical industry—has worsened the global food crisis.²⁷

But the ripple effects of exploding energy prices go far beyond these most affected sectors. They touch every economic activity across the board. The effects of this cost shock for different companies are very heterogenous.²⁸ Some companies are able to use the heightened energy and transportation costs as a pretext to limit capacity and increase prices by more than costs. This exacerbates the problem of windfall profits and households end up being squeezed even more. Several companies in the airline industry, for example, reported record revenues on reduced capacity as ticket prices soared.²⁹ Another example is FedEx. Executive vice president Carere reported to shareholders that they are implementing "inflation plus pricing."³⁰

³⁰ Motley Fool Transcribing (2022, June 24). FedEx (FDX) Q4 2022 Earnings Call Transcript

Weber, Isabella M., Mark Paul (2022, August 17). Inflation causing real pain. But raising interest rates will make it worse. Retrieved September 13, 2022, from https://www.theguardian.com/commentisfree/2022/aug/17/inflation-is-causing-real-pain-but-raising-interest-rates-will-make-it-worse

²⁶ Badger, Emily, Eve Washington (2022, July 14). The Housing Shortage Isn't Just a Coastal Crisis Anymore, The New York Times, Retrieved September 13, 2022, from

https://www.nytimes.com/2022/07/14/upshot/housing-shortage-us.html

²⁷ Stanley, Andrew (2022). War fuels food crisis, Finance and Development, International Monetary Fund, Retrieved September 13, 2022, from https://www.imf.org/en/Publications/fandd/issues/2022/06/war-fuels-food-crisis-picture

²⁸ Black, Thomas (2022). Inflation's Winners Need to Help Out the Losers, Bloomberg, Retrieved September 13, 2022, from

https://www.bloomberg.com/opinion/articles/2022-08-26/inflation-s-winners-need-to-help-out-the-losers ²⁹ Groundwork Collaborative (2022). Airline Earnings Calls. Retrieved September 13, 2022, from https://endcorporateprofiteering.org/latest-research/?company=&type=airlines

Retrieved September 13, 2022, from https://www.fool.com/earnings/call-transcripts/2022/06/24/fedex-fdx-q4-2022-earnings-call-transcript/

On the other end of the spectrum, companies with more price-sensitive customers or where competition is intense as in the case of small businesses³¹ get squeezed by high fuel prices. Take the example of, Walmart, America's largest employer with 2.3 million jobs. The company not only faces higher costs but its customers are also stripped of their purchasing power as they spend larger shares of their income on necessities like energy, food, and housing which drives down demand. ³² Walmart CEO McMillion justified disappointing lower-than-expected earnings to the shareholders pointing to costs: "we generally passed on cost increases from suppliers at the category cost of goods level, but fuel costs accelerated during the quarter faster than we were able to pass them through."³³ Like other major retailers, Walmart fell behind shareholder expectations in the first quarter of 2022 and saw its stocks crumble after initially benefitting from the pandemic. Walmart has regained ground recently, but cost shocks in the fossil fuel industry can put millions of jobs at risk.

Fossil fuel price explosions create macroeconomic risks and stand in the way of climate change mitigation

I have demonstrated that the fossil fuel price explosion has created massive redistribution benefitting the top 1%, Wall Street and asset managers, while hurting ordinary Americans, first and foremost low-income households and communities of color. The fossil fuel intensity of the American economy presents a systemic risk for inflation that has now materialized once more.³⁴ Because fossil fuels are an ingredient in so many production processes—directly or indirectly—price explosions create ripple effects throughout the whole economy. This can have major macroeconomic implications. It can reduce aggregate demand as consumers spend increasing parts of their purchasing power on energy. Exploding fossil fuel prices also make investments in physical capital more expensive across the board and can affect profitability. As fossil fuel assets become extremely profitable, other industries become comparatively less attractive which can channel financial capital away from productive

https://www.washingtonpost.com/business/2022/03/12/gas-prices-economy-inflation/

³¹ Bhattarai, Abha (2022, March 12). Beyond the pump: Record gas prices are pushing up everyday costs, dampening economic recovery, Washington Post, Retrieved September 13, 2022, from

³² Paris, Martine (2022, September 12). Holiday Sales Growth to Slow to 4% to 6% as Inflation Takes Toll, Retrieved September 13, 2022, from https://www.bloomberg.com/news/articles/2022-09-13/holiday-sales-growth-to-slow-to-4-to-6-this-year-deloitte-says

³³ Motley Fool Transcribing (2022, May 17). Walmart Inc. (WMT) Q1 2023 Earnings Call Transcript, Retrieved September 13, 2022, from https://www.fool.com/earnings/call-transcripts/2022/05/17/walmart-inc-wmt-q1-2023-earnings-call-transcript/

³⁴ Weber, Isabella M., Jesus L. Jauregui, Lucas Teixeira, Luiza (2022). Inflation in times of overlapping emergencies: Systemically significant prices from an input-output perspective. University of Massachusetts Amherst, Department of Economics Working Paper (forthcoming).

investments which harms job creation. These are some of the reasons why 10 out of 12 recessions in post-war America were preceded by large oil price increases.³⁵ Recessions ultimately bring unemployment and set the US economy back.

Oil price explosions also make climate change mitigation more expensive as they drive up the costs for green infrastructure and renewable energy facilities urgently needed to tackle the climate crisis. The present profit bonanza in fossil fuels also strengthens the vested interest in this industry. A transition to a low carbon economy requires a fast phase-out of fossil fuel production and the "stranding" of fossil fuel assets. Before the most recent profit explosion, researchers estimated that more than US \$1 trillion in fossil fuel assets would need to be written off globally to implement the Paris Climate Agreement. This number climbs further when profit expectations increase, which in turn heightens the financial risks involved in a green transition.³⁶

We need new institutions and policies for emergency price stabilization

Oil prices are structurally volatile because of the large-scale capital investments they require. As I have illustrated, letting oil prices shoot up is harmful in many ways, but letting oil prices crush can also present a challenge for a transition to renewable energies, as renewables can lose their relative price advantage. The foremost task is to increase the supply in renewable energies as quickly as possible and by all means available. The world is reaching several disastrous climate-tipping points at once.³⁷ No more time is to be lost. We need to broaden the toolbox of price stabilization as the Emergency Price Stabilization Act rightly emphasizes. One option could be a price ceiling for oil and a commitment by the Strategic Petroleum Reserve to stabilize prices by buying oil if they fall below a certain limit. This would create a price corridor that alleviates the inflation risk from fossil fuels. It would also increase supply and help balance markets in the short run. If oil companies cannot reap higher profits by producing less, they will produce more at lower prices. It would also ensure that the strategic reserves are well stocked to buffer price and real shocks. At the same time ambitious industrial policy is needed to escape fossil fuel dependence.

³⁵ Hamilton, James (2011, February). Historical Oil Shocks. NBER Working Paper 16790, Retrieved September 13, 2022, from https://www.nber.org/papers/w16790

³⁶ Semieniuk, G., P. Holden, J. Mercure, P. Salas, H. Pollitt, K. Jobson, P. Vercoulen, U. Chewpreecha, N. Edwards, J. Viñuales. 2022. Stranded fossil-fuel assets translate to major losses for investors in advanced economies. *Nature*

Climate Change, 12(6), 532-538. https://doi.org/10.1038/s41558-022-01356-y

³⁷ Carrington, Damian (2022, September 14). World on brink of five 'disastrous' climate tipping points, study finds, The Guardian, Retrieved September 13, from 2022,

https://www.theguardian.com/environment/2022/sep/08/world-on-brink-five-climate-tipping-points-study-finds

Taxing windfall profits can play a positive role in alleviating the redistributive effects of the profit explosion that I have laid out. Energy-insecure households urgently need to be supported. The energy burden is too high for them to carry. This has to involve a combination of investments in weathering homes for low-income households. Until these can be implemented, the cost for basic energy needs has to be brought down for households below a certain income threshold. Such energy price breaks for basic consumption are currently being implemented in European countries. The German government is assessing a proposal for such a dual-track pricing model for gas with a stabilized price for basic needs and a market price for the remaining consumption. Dr. Sebastian Dullien and I have designed this approach to combine incentives to safe energy with energy security for all. Austria has implemented this model for electricity. It could be adapted also to the US context.

This testimony has illustrated the wide-ranging implications of a fossil fuel price and profit shock. Shocks in other systemically important sectors can have similar ripple effects.³⁸ We are living in times of overlapping emergencies: climate change, the pandemic and mounting geopolitical tensions.³⁹ It is important to create policies and institutions that enable the U.S. to be prepared for the economic consequences of supply shocks. This includes monitoring capacity for supply and price dynamics in systemically significant sectors along with contingency policies that enable a quick response to shocks with the aim to contain the economic consequences, rather than to let them cascade through the whole system.

³⁸ Dullien, Sebastian, Isabella M. Weber (2022). Mit einem Gaspreisdeckel die Inflation bremsen, Wirtschaftsdienst, Volume 102, Retrieved September 13, 2022, from

https://www.wirtschaftsdienst.eu/inhalt/jahr/2022/heft/3/beitrag/mit-einem-gaspreisdeckel-die-inflation-bremsen.html

Dullien, Sebastian, Isabella M. Weber (2022). Höchste Zeit für einen Gaspreisdeckel: ein wichtiges Instrument im Kampf gegen Energiepreisbelastung, Volume 102, Retrieved September 13, 2022, from

https://www.wirtschaftsdienst.eu/inhalt/jahr/2022/heft/8/beitrag/hoechste-zeit-fuer-einen-gaspreisdeckel-ein-wichtiges-instrument-im-kampf-gegen-energiepreisbelastung.html

³⁹ Weber, Isabella M. (2022, September 6). Interview, Project Syndicate, Retrieved September 13, 2022, from https://www.project-syndicate.org/onpoint/an-interview-with-isabella-weber-inflation-price-controls-deglobalization-china-2022-09?barrier=accesspaylog