



Free markets. Real solutions.

R STREET POLICY STUDY NO. 79
December 2016

SWAPPING THE CORPORATE INCOME TAX FOR A PRICE ON CARBON

Catrina Rorke, Andrew Moylan and
Daniel Semelsberger

INTRODUCTION

The corporate income tax and domestic carbon policy are two areas of concern in dire need of reform. In both cases, protracted political infighting has inhibited progress on legislative solutions. The tax code remains as voluminous and convoluted as ever. The outgoing administration spent eight years expanding its authority to reduce greenhouse gas emissions without ever receiving congressional authorization.

Progress on tax reform has been stymied by clear revenue needs. Though there is growing consensus on the need to reduce the U.S. corporate income tax, the available policy tools to achieve that goal – such as a European-style Value Added Tax or broad-based taxes on consumption—remain politically unpopular. Meanwhile, political fissures and a lack of motivation to find bipartisan agreement continue to block progress on greenhouse gas emissions.

CONTENTS

Introduction	1
Trading carbon for capital	1
Corporate income tax repeal	2
Carbon tax receipts	4
Pro-growth design	6
Tax swap summary	6
Conclusion	7
About the authors	7

FIGURE 1: Replacing the corporate income tax 2

TABLE 1: Other carbon price proposals 4

Though it would no doubt be politically adventurous, there is a way to pair these two policy areas to yield an economically optimal tradeoff: an orchestrated swap of existing taxes on stuff we like for new taxes on stuff we don't. This swap could take any number of forms. Policy analysts and advocacy groups have in the past advanced proposals to use the proceeds from a tax on carbon emissions to reduce taxes on labor, on capital or on some combination thereof.

Despite the political baggage associated with the climate debate, lawmakers could soon discover—as they attempt to slay the corporate tax code's many sacred cows—that a price on carbon just might be the easiest way to finance substantial tax reform. Moreover, the combination of a price on carbon with deep reductions in corporate tax rates would reduce government interference in the private market and in the energy market, in particular.

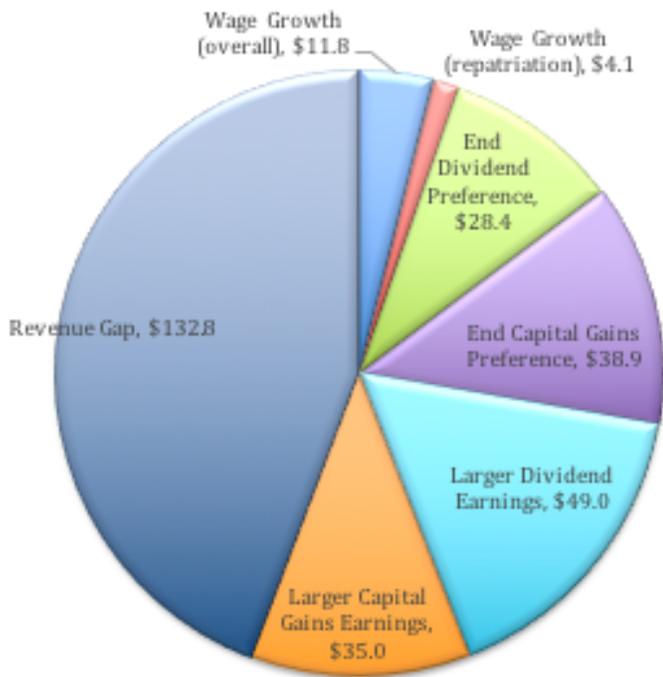
Given the salience of those goals, this paper proposes a politically feasible and revenue-neutral plan to use a price on carbon emissions to eliminate the U.S. corporate income tax completely.

TRADING CARBON FOR CAPITAL

The economic literature suggests that taxes on capital, which are broadly distributed throughout the tax code, are the most distortionary form of taxation. Efforts to reduce taxes on capital thus rank among the best ways to induce economic growth. Alas, systematically ferreting out the many ways the existing rules tax capital would require radical changes to the code and a lengthy period of transition, and likely would prove politically impossible.

A simpler approach to achieve many of the same goals would be to eliminate the corporate income tax. Of course, this idea would face political challenges of its own, given that the corporate income tax is quite popular. Roughly 70 percent of Americans say they want companies to “pay their fair share”

FIGURE I: REPLACING THE CORPORATE INCOME TAX



NOTES: 2016 estimates. All figures in billions.

of the tax burden.¹ President Barack Obama marshalled this sentiment earlier this year, when his Treasury Department proposed a set of rules to combat corporate tax inversions, suggesting companies that incorporate abroad are “gaming the system” at the expense of the middle class.²

What isn’t controversial among tax policy economists is that the corporate income tax is highly distortionary, costing roughly \$140 billion annually in compliance costs. It’s also highly inefficient. Though the United States has the highest nominal corporate rate among Organization of Economic Cooperation and Development nations, the corporate tax manages to bring in just 10 to 12 percent of federal tax revenue. Moreover, as demonstrated in a prior R Street policy short, the burden of taxes on corporate income actually falls on a combination of employees, customers and shareholders.³

The good news is that broad bipartisan agreement for corporate tax reform has been building for several years. This appears to be, at least in part, a consequence of mounting evi-

1. John W. Schoen, “Do companies pay ‘fair share’? Depends whom you ask,” CNBC, Sept. 22, 2014. <http://www.cnbc.com/2014/09/21/axes-do-companies-pay-their-fair-share-of-taxes-depends-how-you-ask.html>

2. Hamilah Abdullah and the Associated Press, “Obama: Offshore Tax Schemes, Havens Are ‘Gaming the System,’” NBC News, April 5, 2016. <http://www.nbcnews.com/storyline/panama-papers/treasury-looks-companies-lowering-tax-rates-mov-ing-abroad-n550936>

3. Andrew Moylan, “Corporate Income Tax: More trouble than it’s worth,” R Street Institute, September 2016. <http://www.rstreet.org/policy-study/corporate-income-tax-more-trouble-than-its-worth>

dence that exceedingly high U.S. corporate taxes are pushing jobs, investments and companies themselves overseas. The wave of inversions—in which U.S. companies move their legal domiciles to lower-tax nations—has brought attention to the problem, while the lingering lackluster recovery from the last recession is seen to reflect underinvestment in the domestic workforce.

CORPORATE INCOME TAX REPEAL

The federal corporate income tax rate is 35 percent. When combined with the average state corporate tax rate, the total rises to 39 percent. Not only is that the highest rate among OECD members, but it’s the third-highest globally, behind only Chad and the United Arab Emirates. In recent years, there have been calls to reduce the corporate income tax by 10 to 15 percentage points, most of which would be financed by eliminating a range of tax breaks and closing tax-avoidance loopholes. After exhaustive hearings, working groups and exchanges with the public, former House Ways and Means Chairman Dave Camp, R-Mich., in late 2014 delivered a tax reform proposal that would reduce the statutory corporate income tax rate to 25 percent.⁴ The American Enterprise Institute and the Tax Policy Center have separately proposed a path to achieve a 15 percent statutory rate.⁵

We believe the corporate income tax could be eliminated completely with a combination of self-financing and new revenues collected from a fee on carbon emissions.

A full analysis of the revenue impact of eliminating the corporate income tax would require sophisticated modeling, beyond the scope of this paper, to capture myriad behavioral effects. It is nonetheless possible to generate a rough estimate deploying only simple math and available government data.

One such estimate comes from the center-left economist Dean Baker, co-founder and co-director of the left-leaning Center for Economic and Policy Research.⁶ In a 2014 exchange with fellow center-left economist Jared Bernstein, Baker walked through the math of eliminating the corporate income tax entirely. Hardly a blinkered supply-sider, Baker made conservative assumptions about the feedback effects that would reduce the revenue lost to the federal government should it abolish the corporate income tax.

4. Rep. David Camp, “The Tax Reform Act of 2014,” House Ways and Means Committee, Dec. 11, 2014. http://waysandmeans.house.gov/UploadedFiles/Tax_Reform_Executive_Summary.pdf

5. Eric Toder and Alan Viard, “A proposal to reform the taxation of corporate income,” American Enterprise Institute and the Tax Policy Center, June 17, 2016. <https://www.aei.org/publication/a-proposal-to-reform-the-taxation-of-corporate-income>

6. Dean Baker, “Subverting the Inversions: More Thoughts on Ending the Corporate Income Tax,” Center for Economic Policy Research, Aug. 26, 2014. <http://cepr.net/blogs/beat-the-press/subverting-the-inversions-more-thoughts-on-ending-the-corporate-tax>

Some portion of the untaxed corporate income would be realized by workers in the form of higher wages, which thus would be taxed as personal income. Another portion would be realized by shareholders in the form of dividends or capital gains, which also would be taxed. When it comes to what economists call the “incidence” of the corporate income tax—that is, which parties bear its burden—a 2007 review by the U.S. Treasury Department finds that labor bears 73 percent of the corporate tax through depressed wages.⁷ A 1998 survey of public finance economists suggested labor’s share may be closer to 60 percent.⁸

Our estimate builds on Baker’s approach, which we consider a careful, if cursory, analysis that yields modest results. Baker uses the Tax Policy Center’s estimate that labor bears just 20 percent of the incidence of the corporate income tax. We use the somewhat higher, but still very conservative, estimate of 30 percent. Given the Congressional Budget Office’s projection that 2016 corporate income tax receipts are about \$300 billion,⁹ eliminating the tax would mean an additional \$90 billion would flow to workers through higher wages. Roughly \$11.8 billion of that total would then flow back to the government through the personal income tax.¹⁰

Baker’s analysis assumes that, should the corporate income tax be abolished, the tax code’s current preferential treatment of capital gains and dividend income also would end, with rates on both made to match ordinary income tax rates. This would make sense, as a major reason for preferential rates on capital gains and dividends is to offset the double-taxation inherent in the corporate income tax. Rather than model the impacts exhaustively, Baker makes the simple assumption that ending preferential rates would cause dividend taxes to rise 10 percentage points and capital gains taxes to rise 5 percentage points. This simplification inevitably misses some movement, but it likely understates the revenue impact.

The Internal Revenue Service reported \$254.7 billion in taxable dividend income in 2014,¹¹ which suggests raising the tax rate on dividends by 10 percentage points would bring

in an additional \$25.5 billion. Combining the capital gains reported to the IRS on Form 1040 and the net of gains and losses reported on Schedule D produces a total of \$698.6 billion of capital gains in 2014.¹² Raising the tax applied to that base by an additional 5 percentage points would net \$34.9 billion in additional tax receipts.

We then updated that additional \$60.4 billion of taxes on 2014 dividends and capital gains to account for nominal gross domestic product growth between 2014 and 2016. Making adjustments based on GDP growth from the third quarter of 2014 to the third quarter of 2016,¹³ we project that eliminating the preferential rate on capital gains and dividends would net \$67.3 billion in additional tax receipts from feedback effects in 2016.

This \$67.3 billion figure does not account for any additional dividend payments or capital gains distributions that would come about because companies no longer have to pay the corporate income tax. Baker assumes that half of all corporate profits are paid out in dividends, which is actually somewhat lower than the historical average. At a 30 percent average rate, this would represent an additional \$49 billion in tax revenues from dividends.¹⁴ Assuming that corporate profits increase by 25 percent, it would correspond to an additional \$35 billion in federal receipts from capital gains taxes.

The sum total of these back-of-the-envelope calculations is that feedback effects from eliminating the corporate income tax, in concert with ending capital gains and dividend tax preferences, would return \$163.1 billion of tax receipts to federal coffers. In other words, even before one engages in more sophisticated modeling of behavioral effects, corporate income tax repeal would be significantly self-financing. More than half the projected revenue loss associated with ending the corporate income tax would be recouped through other taxes.

One impact that Baker does not explore is the potential for significant repatriation of corporate profits held offshore. The excessively high corporate income tax rate presents a substantial barrier to repatriating income, leading U.S. firms

7. William M. Gentry, “A Review of the Evidence on the Incidence of the Corporate Income Tax,” U.S. Department of the Treasury Office of Tax Analysis, December 2007. <https://www.treasury.gov/resource-center/tax-policy/tax-analysis/Documents/WP-101.pdf>

8. Robert Carroll, “The Corporate Income Tax and Workers’ Wages: New Evidence from the 50 States,” Tax Foundation, August 2009. <http://taxfoundation.org/sites/taxfoundation.org/files/docs/sr169.pdf>

9. Congressional Budget Office, “An Update to the Budget and Economic Outlook: 2016 to 2026,” Table I-1, August 2016. <https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/51908-2016outlookupdateonecol-2.pdf>

10. We derive the estimated individual income tax rate of 13.1 percent from: <http://taxfoundation.org/article/summary-latest-federal-income-tax-data-0>

11. Internal Revenue Service, “Table I.4. All Returns: Sources of Income, Adjustments, and Tax Items, by Size of Adjusted Gross Income, Tax Year 2014 (Filing Year 2015),” Statistics of Income Division, Publication 1304, August 2016. <https://www.irs.gov/pub/irs-soi/14in14ar.xls>

12. Note that Baker’s analysis seems to include an error that overstates capital gains distributions significantly. In order to perform a more accurate, and also more modest, analysis we refer to the IRS Statistics of Income Data to capture the small amount of capital gains that flow directly to Form 1040, plus the net of gains minus losses from Schedule D. In the IRS data sheet specifically, this is cell Y9 + (cell AA9 – cell AC9). <https://www.irs.gov/pub/irs-soi/12in14ar.xls>

13. U.S. Bureau of Economic Analysis, “Current-Dollar and ‘Real’ Gross Domestic Product,” Nov. 29, 2016. <http://www.bea.gov/national/xls/gdplev.xls>

14. Assuming half of all profits are paid out in dividends is a bit less than the historic average. As of 2015, the U.S. had a 28.6 dividend tax rate and that number has more or less held constant through 2016. See Kyle Pomerleau, “The Tax Burden on Personal Dividend Income across the OECD 2015,” Tax Foundation, June 25, 2015. <http://taxfoundation.org/article/tax-burden-personal-dividend-income-across-oecd-2015>; see also: Organisation for Economic Co-operation and Development, “OECD Tax Database: Corporate and Capital Income Taxes,” accessed December 2016. http://www.oecd.org/tax/tax-policy/tax-database.htm#C_CorporateCapital

to hold trillions of dollars offshore. Eliminating the corporate income tax would eliminate that barrier, encouraging companies to bring back billions to pay to shareholders and to invest in labor and capital growth.

The latest IRS data estimates U.S.-controlled foreign corporate earnings at \$1.053 trillion, before income taxes.¹⁵ Estimating that a modest additional 10 percent of those earnings would be repatriated each year, an additional \$105.3 billion would be injected into the economy annually. Estimating again that 30 percent of that total would flow to higher wages, which would be subject to average effective income tax rates, repatriation effects would bring in an additional \$4.1 billion in annual income tax revenue. This total excludes any one-time effects and or more complicated calculations of flows to investment income.

In total, we have identified at least \$167.2 billion that we believe would flow back to the Treasury if the corporate income tax were eliminated. In reality, the total is probably significantly higher, given that a 0 percent corporate income tax would encourage and attract investment.

To be sure, there also would be significant one-time effects. An obvious analogue can be found in the 2004 “corporate tax holiday” that Congress enacted to induce repatriation, applying a tax rate of just 5.25 percent to corporate profits returned from offshore. The IRS has estimated that \$362 billion were repatriated, or roughly 45 percent of the total \$804 billion in profits held overseas.¹⁶

One assumes an even larger sum would be repatriated should the corporate income tax be abolished altogether, but for purposes of our analysis, we use the 45 percent figure. The most commonly cited estimate of current offshore holdings is \$2.1 trillion.¹⁷ If 45 percent of those holdings, or \$954 billion, were reinvested in the United States, we anticipate 30 percent of that total, or \$283.5 billion, would flow to increased wages. At the average effective income tax rate, this would

15. Internal Revenue Service, “Table 1. U.S. Corporations and Their Controlled Foreign Corporations: Number, Assets, Receipts, Earnings, Taxes, Distributions, Subpart F Income, and Related Party Transactions, by Industrial Sector and Selected Industrial Subsector of Controlled Foreign Corporation, Tax Year 2012,” Statistics of Income Division, September 2015. <https://www.irs.gov/pub/irs-soi/12it01cfr.xls>

16. Melissa Redmiles, “The One-Time Received Dividend Deduction,” *Statistics of Income Bulletin*, Spring 2008. <https://www.irs.gov/pub/irs-soi/08codivdeductbul.pdf>

17. President Obama’s February 2015 budget puts offshore holdings at \$1.7 trillion, see Paul Lewis, “Obama will propose mandatory tax on US companies’ earnings held overseas,” *The Guardian*, Feb. 1, 2015. <http://www.theguardian.com/us-news/2015/feb/01/obama-budget-tax-big-corporation-overseas-earnings>; Citizens for Tax Justice estimates it at \$2.5 trillion, see Richard Phillips, Matt Gardner, Kayla Kitson, Alexandria Robins and Michelle Surka, “Offshore Shell Games 2016: The Use of Offshore Tax Havens by Fortune 500 Companies,” Citizens for Tax Justice, Institute on Taxation and Economic Policy and U.S. PIRG Education Fund, October 2016. http://ctj.org/ctjreports/2016/10/offshore_shell_games_2016.php#.WEBzV-YrJhE; A recent New York Times article cited a figure more than \$2 trillion, see Jeff Sommer, “A Stranded \$2 Trillion Overseas Stash Gets Closer to Coming Home,” *New York Times*, Nov. 4, 2016. http://www.nytimes.com/2016/11/06/your-money/strategies-corporate-cash-repatriation-bipartisan-consensus.html?_r=0

represent a one-time influx of \$37.2 billion in revenues from the individual income tax, in addition to the \$167.2 billion already identified. We do not include this one-time effect in our estimate of annual feedback effects.

Modeling by the official U.S. tax and budget agencies assumes a 10-year window. Projecting precise figures for a decade of tax receipts would require a more sophisticated approach than we employ here. For our back-of-the-envelope calculation, we instead assume that the percentage of corporate income tax revenues replaced by this combination of taxes on higher wages, capital gains and dividends in a single year would remain relatively stable over a decade.

Our estimate is that roughly 55.7 percent of 2016 corporate income tax revenue would return to the Treasury through other sources. Given that CBO projects average annual corporate income tax receipts over the next decade to be \$376.1 billion, our analysis suggests more than \$209.5 billion of that would be replaced each year by these self-financing feedback effects.¹⁸ The resulting annual gap of \$166.6 billion in foregone tax receipts is much smaller than a cursory glance at the prospect of eliminating the corporate income tax might suggest.

FIGURE 2: OTHER CARBON PRICE PROPOSALS

Authors	Initial price per-ton	Rate of increase (above inflation)	Approximate 10-year revenues (\$B)
Goulder and Hafstead	\$10	5.0%	660
McKibbin, Morris, Wilcoxon	\$15	4.0%	1,000
Morris	\$16	4.0%	1,100
Congressional Budget Office	\$20	5.6%	1,200
Massachusetts Institute of Technology	\$20	5.6%	1,300
Center for American Progress	\$45	2.0%	2,200
Citizens Climate Lobby	\$10	\$10	2,500

CARBON TAX RECEIPTS

To be optimally efficient, a carbon tax would raise revenues equal to the marginal damage caused by carbon emissions. Unfortunately, determining the value of that marginal damage is complicated by a number of uncertainties. These include open questions about climate science, economic responses, global emissions trends and the relative portion

18. Congressional Budget Office, “An Update to the Budget and Economic Outlook: 2016 to 2026,” August 2016. <https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/51908-2016outlookupdateonecol-2.pdf>

of global climate damages or benefits attributable solely to the United States. We also have only a limited understanding of the appropriate discount rate to determine the current value of avoided climate harm; it is an entirely subjective determination.

An alternative approach would be to embrace the political nature of carbon cost estimates and simply set carbon prices at rates sufficient to accomplish significant policy change. In this case, we suggest that the carbon price be set to fill the roughly \$1.66 trillion expected 10-year revenue gap from eliminating the corporate income tax, after accounting for feedback effects.

Carbon tax proposals to date have offered a range of potential revenue estimates. What these proposals have in common is an upstream incidence for a price on carbon, enabling administratively simple tax collection with minimal tax avoidance. This allows the price on carbon to address the 78 percent of domestic greenhouse gas emissions attributable to energy usage and create a higher degree of confidence in the revenue projections for the tax. These proposals also establish a price signal that begins at a relatively low level and rises over time at a rate greater than inflation. The shape of this cost curve enables predictability in out-year prices, but also establishes a clear signal for investors and innovators about when in the future certain technologies will be more or less competitive.

Some proposals offer revenue estimates that fall short of our stated gap. A 2012 proposal from Warwick McKibbin, Adele Morris and Peter Wilcoxon of the Brookings Institution identified a carbon price of \$15 per ton of carbon dioxide, rising at 4 percent above inflation, which raises less than \$1.7 trillion over 15 years.¹⁹ Lawrence Goulder and Marc Hafstead of Resources for the Future proposed a price of \$10 per ton at the outset, rising at 5 percent above inflation. That proposal would take nearly 40 years to reach \$151 billion in annual revenue,²⁰ far short of our target of \$166 billion annually over the first 10 years.

Others come quite close. The March 2011 Congressional Budget Office “Reducing the Deficit” report identified a number of potential revenue options, including a carbon price. The CBO proposal was for a price of \$20 per ton, rising at 5.6 percent over inflation and collecting \$1.2 trillion over the 10-year scoring window. It should be noted that this analysis was for a carbon auction under a cap-and-trade scenario,

not for a direct price on carbon, as we propose. However, the analysis is illustrative in that it gave the revenue projections a 25 percent “haircut” as a rough estimate for a smaller base of income and payroll taxes.²¹

A 2012 Massachusetts Institute of Technology study based on CBO’s numbers suggested that integrating accurate estimates of inflation could increase the 10-year revenue estimate to about \$1.3 trillion.²² Another proposal from Adele Morris with a price starting at \$16 per ton of carbon dioxide and rising at 4 percent above inflation would net about \$1.1 trillion in 10-year revenue.²³ Significantly, her proposal also suggested trimming the corporate rate from 39 to 28 percent.

Other proposals would raise more revenue than needed to fill this gap. Citizens Climate Lobby, a national grassroots advocacy organization, advocates a carbon tax proposal that would begin at \$10 per ton of carbon dioxide and rise at a flat \$10 per year above inflation. This proposal would raise more than \$2.5 trillion over the 10-year scoring window.²⁴ The Center for American Progress generated revenue estimates for the American Opportunity Carbon Fee Act of 2015, sponsored by Sen. Sheldon Whitehouse, D-R.I. Starting at \$45 per ton and rising at 2 percent above inflation, this proposal would take in about \$2.2 trillion over 10 years.²⁵ By our calculations, these proposals would raise amounts that allow for significant tax reductions even beyond elimination of the corporate income tax.

Taken together, it is clear that the design of the price matters quite significantly. A relatively low price rising quickly and a relatively high price rising slowly can generate similar revenue estimates. Based on prior estimates, it appears reasonable to suggest a carbon price of roughly \$25 per ton, rising at a relatively modest level of about 5 percent above inflation, could be designed to offset the estimated roughly \$166 billion

19. Warwick J. McKibbin, Adele C. Morris, Peter J. Wilcoxon and Yiyong Cai, “The Potential Role of a Carbon Tax in U.S. Fiscal Reform,” Brookings Climate and Energy Economics Project, July 2012. <https://www.brookings.edu/wp-content/uploads/2016/06/carbon-tax-mckibbin-morris-wilcoxon.pdf>

20. Lawrence H. Goulder and Marc A. C. Hafstead, “Tax Reform and Environmental Policy,” Resources for the Future, October 2013. <http://www.rff.org/files/sharepoint/WorkImages/Download/RFF-DP-13-31.pdf>

21. Congressional Budget Office, “Reducing the Deficit: Spending and Revenue Options,” March 2011. <https://www.cbo.gov/sites/default/files/112th-congress-2011-2012/reports/03-10-reducingthedeficit.pdf>

22. Sebastian Rausch and John Reilly, “Carbon Tax Revenue and the Budget Deficit: A Win-Win-Win Solution?,” MIT Joint Program on the Science and Policy of Global Change, August 2012. http://globalchange.mit.edu/files/document/MITJPGC_Rpt228.pdf

23. Adele C. Morris, “The Many Benefits of a Carbon Tax,” proposal 11 in The Hamilton Project’s 15 Ways to Rethink the Federal Budget, February 2013. http://www.hamiltonproject.org/assets/legacy/files/downloads_and_links/THP_15WaysFedBudget_Prop11.pdf

24. Regional Economic Models Inc. and Synapse Energy Economics Inc., “The Economic, Climate, Fiscal, Power, and Demographic Impact of a National Fee-and-Dividend Carbon Tax,” prepared for Citizens Climate Lobby, June 2014. <https://www.dropbox.com/s/22lrokkdaf4a8fh/The-Economic-Climate-Fiscal-Power-and-Demographic-Impact-of-a-National-Fee-and-Dividend-Carbon-Tax-6.9.14.pdf?dl=0>

25. Greg Dotson and Ben Bovarnick, “Carbon Pricing in a Fiscal Context,” Center for American Progress, June 2016. <https://cdn.americanprogress.org/wp-content/uploads/2016/06/28144132/CarbonPriceFiscal-brief.pdf>

annual revenue gap that would remain after repealing the corporate income tax.

PRO-GROWTH DESIGN

Any tax that policymakers might impose should be designed mindfully. A well-designed carbon price is crucial to avoid the political manipulations of tax-avoidance lobbying, to build the justification for rollback of redundant environmental regulations and, crucially, to justify a border tax adjustment that would strengthen the policy and insulate domestic companies from “carbon dumping” by foreign competitors.

As mentioned previously, creating an upstream point of taxation is critical. A price on carbon should be imposed at those points for which internal accounting or external collections of state and federal excise taxes offer the greatest administrative simplicity. For coal, this would be at the mine mouth. For natural gas, it would be at the wellhead or processing plant. For petroleum products, it would be at the refinery rack. Upstream siting of this sort would serve to counter lobbying efforts to avoid the tax basis, ensuring the price is equitably distributed across the energy sector.

A successful price on carbon—one that accounts for all costs imposed by emissions—would render unnecessary the full suite of government policies that currently serve as proxies to reduce carbon emissions. First on the chopping block, of course, would be the Environmental Protection Agency’s Clean Power Plan and all assorted regulations the EPA has issued to reduce carbon emissions from any source covered by the carbon price.

But there’s much else to cut beyond EPA regulations. Special tax preferences that in the past have been justified by climate concerns—such as the investment and production tax credits for renewable energy—also would be eliminated. We could further eliminate grant programs for “clean” energy sources, even loan and loan guarantee programs. The Department of Energy Appliance and Equipment Standards Program, which has issued more than 40 individual efficiency standards for household and commercial appliances over the last seven years, should be terminated. Restrictions on fossil resource development also should be rolled back.

Axing federal policies designed to restrict carbon dioxide emissions from the energy sector as a whole would eliminate billions of dollars in compliance costs for industry and shrink the federal government’s rulemaking and enforcement capabilities. Estimates of the price of carbon dioxide emissions eliminated through those existing policies range from \$0.17 to \$125.15 per ton.²⁶ With a simple unified carbon price, we

can scale back these policies and the accompanying costs to industry.

A remaining critical design feature is that the carbon tax must be adjustable at the border, imposed on imports and removed from exports. This is critical to maintain a strong domestic basis for the policy, capturing all energy and energy-intensive goods under the program and ensuring that the price signal is effective and durable. It is also crucially important for our energy-intensive industries that they be able to continue to trade in foreign markets that may have wildly different carbon policies, without suffering disadvantage.

TAX SWAP SUMMARY

In this paper, we have elucidated a path to eliminate the corporate income tax outright and instead impose a direct price on carbon. This is a combination specifically designed to promote economic growth and strengthen domestic job creation. It requires conceding two points. First, the corporate income tax—politically popular though it may be—is paid by workers, customers and investors, not by companies themselves. Second, price signals and market forces will go further at lower cost to reduce greenhouse gas emissions in the energy economy.

It is no understatement to say that eliminating the burden of the corporate income tax would be a huge boon to job creation, income growth and investment. While most tax reform proposals suggest modest reductions in the corporate rate to better align it with the tax rates of OECD nations, outright elimination of the corporate income tax is a more radical approach that would establish the United States—with clear rule of law, a well-trained workforce and abundant intellectual and natural resources—as the ideal place to do business. High U.S. corporate taxes have fueled an exodus to lower-tax jurisdictions like Ireland and others. Eliminating the corporate income tax would reverse that exodus immediately.

This revenue-neutral swap must also be used to shrink the footprint of government in the energy sector. In the absence of congressional legislation to address greenhouse gas emissions, the executive branch and the states have proliferated a number of policies that take the place of a comprehensive national plan. We expect that a robust price on carbon at the federal level justifies not just rolling back redundant federal policies, but also would encourage states to abandon efforts to create a patchwork of carbon policies.

This would mean backing away from interstate carbon credit trading programs like the Regional Greenhouse Gas Initiative and iterative policies that mandate certain percentages of energy come from renewable sources. At a minimum, we expect that systems that trade in carbon credits will no longer be binding; the federal price on carbon will be more

26. Catrina Rorke, “A Carbon Bargain for Conservatives,” R Street Institute, September 2016. <http://www.rstreet.org/policy-study/a-carbon-bargain-for-conservatives>

significant and durable than the carbon markets have been. In an ideal scenario, we would eliminate state policies that make investments and energy trade across the states more difficult.

This revenue-neutral swap also would serve as an excellent model for other nations. Policies like the European Union Emissions Trading System are perfect examples of overdesigned and unsuccessful carbon policies. Directly pricing emissions is an elegant approach that leaves all further decision-making on pathways, investments and innovation to a private sector that would be motivated by a predictable price signal. Directly pricing emissions also allows, as we see here, significant changes in existing tax structures that hold back growth.

Expectations across the carbon pricing literature suggest that a carbon tax with an increasing rate of taxation would bring in higher levels of receipts year-over-year until emissions reductions outweigh rate increases and receipts begin to drop. It is a feature, not a bug, of a carbon tax that it eventually would take in no revenue. A carbon price is a policy specifically designed to put itself out of business. By setting the benchmark that lower taxes are wise policy and that specific policy outcomes can be achieved while simultaneously shrinking the government's footprint, this proposal could serve as a model for policies that reduce the size of government broadly.

CONCLUSION

It is possible to achieve dramatic reform in the corporate income tax structure and in our approach to carbon emissions simultaneously. Of course, this proposal has its limits. Corporate income taxes remain popular, and calls to make sure companies "pay their fair share" will make it difficult to enact such ambitious policy change. A direct price on carbon emissions remains unpopular on the center-right and the center-left remains focused on a regulatory command-and-control model to reduce emissions. It will be difficult to break through these walls of opposition.

Moreover, this proposal only goes so far. Broad reductions in taxes on capital across the tax code would do the most to spur domestic investment. This version of a carbon price addresses only emissions related to energy usage, an area in which the private sector has had dramatic success even without government policy. To address the many diverse sources of emissions would require policy changes outside the scope of this proposal.

We posit the proposed tax swap's greatest strength is that it accepts that we simply don't know how to shape investment in the corporate sector or how to dictate carbon emission reductions in the energy sector. By curbing the influence of

special interests to dictate corporate tax structures and the constantly expanding regulatory state, we can leave decision making about the future of the economy to the markets, not the limited imagination of bureaucrats. This will make the United States a better place to do business.

Finally, the proposal outlined in this paper relies on simplistic back-of-the-envelope constructions to pursue an interesting idea: eliminating the corporate income tax and the abundant energy regulatory burden. We hope this proposal inspires efforts to model this exchange with far greater granularity, particularly to explore the extent to which corporate income tax elimination will be self-financing and to identify a carbon price that would ensure revenue neutrality.

ABOUT THE AUTHORS

Catrina Rorke is director of energy policy and a senior fellow at the R Street Institute, founding and leading the institute's energy program that seeks to help lawmakers, stakeholders, coalition partners and the policy community make informed decisions about such issues as infrastructure, wholesale and retail electricity, fuel diversity, energy choice and climate adaptation and mitigation.

Andrew Moylan is executive director and senior fellow for R Street, where he helps direct the organization's policy research, outreach and communications efforts. He also conducts analysis on a wide range of issues, with a particular focus on tax and budget, energy and innovation policy.

Daniel Semelsberger is R Street's research assistant for financial services. Before joining R Street, he served as a co-author and editor for textbooks with Higher Rock Education.