

# Provisions in the Internal Revenue Code Favoring Conventional Coal

Elizabeth Paranhos on behalf of  
Environmental Defense Fund  
April 28, 2011



# Overview: GHG Emissions

- Coal plants are the single largest U.S. anthropogenic source of carbon dioxide emissions in the U.S. Coal plants emitted 1,841 MMtCO<sub>2</sub>Eq. in 2009.<sup>1</sup> Coal plants accounted for 50% of the U.S. electricity in 2005 yet 81% of the nation's CO<sub>2</sub> emissions.<sup>2</sup>
- Coal plants emitted 9.3 million tons of CO<sub>2</sub>e of nitrous oxide in 2009. Electricity produced from lignite creates black carbon emissions.<sup>3</sup>
- Coal mining is the fourth largest source of anthropogenic methane emissions in the U.S. 2009 CH<sub>4</sub> emissions equaled 71 MMtCO<sub>2</sub>Eq.<sup>4</sup>
- Deforestation and landscape changes due to mountaintop removal mining impact carbon storage and water cycles and increase lifecycle GHG emissions by 17%.<sup>5</sup>

# Costs

- A recent lifecycle analysis of coal estimates that GHG emissions from coal mining, transport, processing and combustion for electricity use costs society \$61.7 billion. Values damages caused by emissions of 1 Mt carbon at \$30/ton of CO<sub>2</sub>e.<sup>6</sup>
- According to a 2010 report by the National Academy of Sciences, deleterious air pollution from U.S. coal-fired power plants caused \$62 billion in damages to public health, agriculture and the environment in 2009. These damages consist primarily of premature mortalities caused by fine particulate matter emissions.<sup>7</sup>
- Recent lifecycle estimate is that coal-based electricity causes health and environmental damages of \$345.3 billion a year. Costs derive from damages due to climate change; public health damages from NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>2.5</sub>, and mercury emissions; fatalities due to rail transport; public health burden in Appalachia; government subsidies; lost value of abandoned mine lands.<sup>9</sup> According to report, “[T]he true ecological and health costs of coal are [thus] far greater...” as not all impacts are quantified.<sup>10</sup>

# OVERVIEW: METHODOLOGY

- Scope: Examined provisions in the Internal Revenue Code that subsidize mining, processing, transport and combustion of conventional coal to generate electricity or for industrial purposes.
- Screened out subsidies for advanced coal technologies, carbon capture and sequestration, reclamation, and recipients of black lung disease benefits. Refined coal credits are included because IRC does not require GHG reductions as part of qualified refined coal emission credit.

# Primary Sources

- Congressional Joint Committee on Taxation, Estimates of Federal Tax Expenditures for Fiscal Years 2010-2014, (Dec. 15, 2010), <http://www.jct.gov/publications.html?func=startdown&id=3718>.
- Office of Management and Budget Fiscal Year 2012 ANALYTICAL PERSPECTIVES Budget of the U.S. Government, <http://www.whitehouse.gov/sites/default/files/omb/budget/fy2012/assets/list.pdf>.
- OMB FY 2012 Terminations, Reductions, and Savings, <http://www.whitehouse.gov/sites/default/files/omb/budget/fy2012/assets/trs.pdf>.
- U.S. House of Representatives, Concurrent Resolution on the Budget-Fiscal Year 2012, Report of the Committee on the Budget on H. Con. Res. 000, <http://budget.house.gov/UploadedFiles/fy2012FullReportText.pdf>.
- ELI, Estimating U.S. Government Subsidies to Energy Sources: 2002-2008 (Sept. 2009), [http://www.elistore.org/Data/products/d19\\_07.pdf](http://www.elistore.org/Data/products/d19_07.pdf).

# Capital Gains Treatment for Royalties

- IRC § 631(c), “Gain or loss in the case of timber, coal, or domestic iron ore”. Individual owners of coal mining rights normally receive royalties for leasing their property. Royalties are taxed at capital gains rate of 15% instead of normal income tax rate of 10-35%.<sup>11</sup>
- Revenue losses FY 2010-2011: \$100,000,000.<sup>12</sup>
- President’s proposed budget repeals this provision.<sup>13</sup>
- House budget resolution does not include recommendations for eliminating specific provisions in IRC. Does call for “eliminating large tax expenditures” as general policy goal.<sup>14</sup>

# Credit for producing fuel from a nonconventional source

- IRC § 45K, “Credit for producing fuel from a nonconventional source”, provides income tax credit for production of electricity from refined coal and credit for coal mined and produced on Tribal lands. Credits for refined coal facilities placed in service before 1/1/2010 and Indian coal facilities before 1/1/2009.<sup>15</sup>
- Refined coal must be certified to result in a qualified emission reduction equal to at least 20% of the nitrogen oxide and 40% of either sulfur dioxide or mercury emissions released from burning other coal. IRC § 45(c)(7)(B).
- Credit also available for renewable energy sources such as wind, biomass, geothermal and solar.
- Revenue loss equal < \$100,000,000 FY 2010-2011.<sup>16</sup>

# Percentage depletion deduction

- IRC § 613, “Percentage depletion”, allows for coal producers to deduct 10% of gross income from coal production rather than limiting deduction to costs of investment in mineral production. As a result, percentage depletion deductions can exceed costs of investment over the life of an investment.<sup>17</sup>
- Fy 2010-11 revenue losses equal ~ \$400,000,000. <sup>18</sup> Some proportion of the \$400,000,000 is attributable to uranium production.
- President’s proposed budget repeals this provision for coal and other hard-mineral fossil fuels.<sup>19</sup>



# Expensing exploration and development costs

- IRC § 617, “Deduction and recapture of certain mining exploration expenditures”, allows for immediate deduction of exploration and development costs related to surface stripping and construction of shafts and tunnels rather than amortizing costs over life of mine.<sup>20</sup>
- FY 2010-2011 ~ \$100,000,000 in revenue losses.<sup>21</sup>
- President’s budget proposes repeal.<sup>22</sup>

# Clean renewable energy bond credit for refined coal

- IRC §§ 54A and 54C, “Credit to holders of qualified tax credits” and “New clean renewable energy bonds”, allows governmental bodies, qualified bond lenders and electric cooperatives to finance refined coal projects with 0% interest loan.<sup>23</sup>
- Bond holder receives tax credit in lieu of bond interest.
- Revenue losses = some proportion of \$100,000,000. Credit is also available for geothermal, solar, biomass, landfill gas, wind and other renewable energy projects.<sup>24</sup>

# Credit for holder of qualified energy conservation bond

- IRC § 54D, “Qualified energy conservation bonds”, provides for 0% interest loan to producers of refined coal. Issued by states, local and tribal governments without need for U.S. Treasury application and approval process.<sup>25</sup>
- Losses = some proportion of \$100,000,000. Credit is also available for geothermal, solar, biomass, landfill gas, wind and other renewable energy projects.<sup>26</sup>

# Domestic manufacturing deduction

- IRC § 199, “Income attributable to domestic production activities”, allows a 9% income tax deduction for the sale, exchange or disposition of coal produced in the U.S.<sup>27</sup>
- FY 2012 losses = some proportion of \$20,000,000.<sup>28</sup>
- President’s proposed budget suggests repeal.

# Expensing 50% qualified property to refine liquid fuels

- IRC § 179C, “Election to expense certain refineries”, provides for expensing (deduct immediately) of 50% of the cost of qualified refinery property used to refine liquid fuels produced from coal rather than depreciating over time.<sup>29</sup>
- Losses = a proportion of \$1,500,000,000 for FY 2010-2011.<sup>30</sup> Deduction also applies to refineries of crude oil and oil produced from shale and tar sands.

# Notes

1. EPA, 2011 Draft U.S. Greenhouse Gas Inventory Report, 3-3, Table 3-5 (Feb. 2011), <http://www.epa.gov/climatechange/emissions/downloads11/US-GHG-Inventory-2011-Chapter-3-Energy.pdf>.
2. Paul R. Epstein, et al., Full Cost Accounting for the Life Cycle of Coal, 1219 *Annals N.Y. Acad. Sciences*, 73 (2011), <http://onlinelibrary.wiley.com/doi/10.1111/j.1749-6632.2010.05890.x/full>.
3. *Id.* at 88.
4. EPA 2011 Draft GHG Inventory at ES-5, Table ES-2.
5. Epstein *et al.*, at 77.
6. Epstein *et al.*, at 88.
7. National Academy of Sciences, Hidden Costs of Energy: Unpriced Consequences of Energy Production and Use, 92 (2010), [http://www.nap.edu/catalog.php?record\\_id=12794](http://www.nap.edu/catalog.php?record_id=12794).
8. Epstein, *et al.*, at 93.
9. *Id.* at 75.
10. *Id.*
11. [http://www.law.cornell.edu/uscode/html/uscode26/usc\\_sec\\_26\\_00000631----000-.html](http://www.law.cornell.edu/uscode/html/uscode26/usc_sec_26_00000631----000-.html).
12. OMB FY 2012 ANALYTICAL PERSPECTIVES at 241, <http://www.whitehouse.gov/sites/default/files/omb/budget/fy2012/assets/list.pdf>.
13. OMB FY 2012 Terminations, Reductions and Savings at 79, <http://www.whitehouse.gov/sites/default/files/omb/budget/fy2012/assets/trs.pdf>.
14. U.S. House of Representatives, Concurrent Resolution on the Budget-Fiscal Year 2012, Report of the Committee on the Budget on H. Con. Res. 000, 131, <http://budget.house.gov/UploadedFiles/fy2012FullReportText.pdf>.
15. [http://www.law.cornell.edu/uscode/html/uscode26/usc\\_sec\\_26\\_00000045---K000-.html](http://www.law.cornell.edu/uscode/html/uscode26/usc_sec_26_00000045---K000-.html).
16. Joint Committee on Taxation, Estimates of Federal Tax Expenditures for Fiscal Years 2010-2014, (Dec. 15, 2010), <http://www.jct.gov/publications.html?func=startdown&id=3718>, Table 1, p.36 (“coal production credits”).
17. [http://www.law.cornell.edu/uscode/html/uscode26/usc\\_sec\\_26\\_00000613----000-.html](http://www.law.cornell.edu/uscode/html/uscode26/usc_sec_26_00000613----000-.html).
18. Joint Committee on Taxation, Estimates of Federal Tax Expenditures for Fiscal Years 2010-2014, (Dec. 15, 2010), <http://www.jct.gov/publications.html?func=startdown&id=3718>, Table 1, p.37.

# Notes Continued

19. Office of Management and Budget, Fiscal Year 2012, Terminations, Reductions, and Savings, 77, <http://www.whitehouse.gov/sites/default/files/omb/budget/fy2012/assets/trs.pdf>.
20. [http://www.law.cornell.edu/uscode/html/uscode26/usc\\_sec\\_26\\_00000617----000-.html](http://www.law.cornell.edu/uscode/html/uscode26/usc_sec_26_00000617----000-.html)
21. Joint Committee on Taxation, Estimates of Federal Tax Expenditures for Fiscal Years 2010-2014, (Dec. 15, 2010), <http://www.ict.gov/publications.html?func=startdown&id=3718>, Table 1, p.37
22. See Office of Management and Budget, Fiscal Year 2012, Terminations, Reductions, and Savings, 75, <http://www.whitehouse.gov/sites/default/files/omb/budget/fy2012/assets/trs.pdf>.
23. [http://www.law.cornell.edu/uscode/html/uscode26/usc\\_sup\\_01\\_26\\_10\\_A\\_20\\_1\\_30\\_A\\_40\\_IV\\_50\\_I.html](http://www.law.cornell.edu/uscode/html/uscode26/usc_sup_01_26_10_A_20_1_30_A_40_IV_50_I.html)
24. Joint Committee on Taxation, Estimates of Federal Tax Expenditures for Fiscal Years 2010-2014, (Dec. 15, 2010), <http://www.ict.gov/publications.html?func=startdown&id=3718>, Table 1, p.35
25. [http://www.law.cornell.edu/uscode/html/uscode26/usc\\_sec\\_26\\_00000054---D000-.html](http://www.law.cornell.edu/uscode/html/uscode26/usc_sec_26_00000054---D000-.html).
26. Joint Committee on Taxation, Estimates of Federal Tax Expenditures for Fiscal Years 2010-2014, (Dec. 15, 2010), <http://www.ict.gov/publications.html?func=startdown&id=3718>, Table 1, p.35
27. [http://www.law.cornell.edu/uscode/html/uscode26/usc\\_sec\\_26\\_00000199----000-.html](http://www.law.cornell.edu/uscode/html/uscode26/usc_sec_26_00000199----000-.html).
28. Office of Management and Budget, Fiscal Year 2012, Terminations, Reductions, and Savings, 80, <http://www.whitehouse.gov/sites/default/files/omb/budget/fy2012/assets/trs.pdf>.
29. [http://www.law.cornell.edu/uscode/html/uscode26/usc\\_sec\\_26\\_00000179---C000-.html](http://www.law.cornell.edu/uscode/html/uscode26/usc_sec_26_00000179---C000-.html).
30. [Joint Committee on Taxation, Estimates of Federal Tax Expenditures for Fiscal Years 2010-2014, \(Dec. 15, 2010\), http://www.ict.gov/publications.html?func=startdown&id=3718](http://www.ict.gov/publications.html?func=startdown&id=3718), Table 1, p.37.