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The American Clean Energy Security Act: Summary of International Provisions

Overview. The American Clean Energy Security Act (ACESA), introduced by U.S. Representatives Henry Waxman (Democrat of California) and Edward Markey (Democrat of Massachusetts) and passed by the U.S. House of Representatives on 26 June 2009, sets progressively tightening legally binding caps on the absolute (total) greenhouse gas (GHG) emissions of large U.S. emitters including electric power stations, manufacturing facilities, and oil refineries.ⁱ These sources will be required to reduce their GHG emissions 17% below 2005 levels (equivalent to roughly 4% below 1990 levels) by 2020, and 83% below 2005 levels (equivalent to roughly 80% below 1990 levels) by 2050. The bill establishes a system of tradable emission allowances in which emitters are required to hold one allowance for each ton of GHG emitted; allowances are tradable and bankable; and the number of allowances issued annually will be reduced steeply from 2012 to 2050.ⁱⁱ

Supplemental reductions from renewable energy, clean energy technologies, and energy efficiency programs, as well as additional measures from deforestation, would, according to the House Energy & Commerce Committee, provide additional reductions that will lower U.S. carbon emissions 28% to 33% below 2005 levels by 2020 and more than 80% below 2005 levels by 2050.

Analysis: The International Aspects

- **Are the cuts steep enough to keep open possibilities for averting more than 2 degrees C. of warming above pre-industrial levels?** Yes. Modeling indicates that the bill's emissions cuts, coupled with commitments already announced by many nations, are sufficient to have a good probability of keeping open options for averting more than 2 degrees of warming - if all other major emitting nations, including those that have not yet announced actions, follow suit. The bill establishes thresholds of 2 degrees Celsius above the pre-industrial average, or an increase in atmospheric GHG concentrations above 450 parts per million carbon dioxide equivalent, directs the National Academy of Sciences to assess whether the efforts by the United States, taking into account other countries' efforts, are sufficient to reach these thresholds or such other thresholds as the National Academy indicates, and authorizes the President to take further steps to ensure these are met.
- **How do the bill's emissions cuts compare to other nations?** The steepness of the bill's progressively tightening mandatory absolute emissions caps is comparable to that in the "20-20-20" European Union package, although the bill necessarily starts from a



ENVIRONMENTAL DEFENSE FUND

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later base year (2005 – the EU’s base year is 1990). The program established by the bill would last longer, from 2012 through 2050 (the EU’s runs from 2013 to 2020). Steeper but shorter-duration cuts have been announced by Brazil, which has launched a mandatory program to reduce deforestation 70% from historical levels by 2017.

- **Does the bill fund adaptation and clean technologies for developing nations?** Yes. The bill allocates allowances for these purposes. At allowance values of \$10/ton, the allocation would amount to a total of approximately \$66 billion for adaptation and clean technology (\$33 billion for each) over the period of years covered by the bill.ⁱⁱⁱ
- **Does the bill’s cap and trade program allow U.S. domestic offsets?** Yes. The bill authorizes up to 1 billion tons annually of domestic offsets, with rigorous per-entity limitations on the percentage of domestic offsets. The bill authorizes the U.S. Department of Agriculture (USDA) to establish a program for determining baselines, additionality, leakage, and other requirements for U.S. domestic offsets.

What terms does the bill set for other nations to gain access to the U.S. carbon market?

The bill allow up to 1 billion tons annually of international offsets to come into the U.S. carbon market, with rigorous per-emitter limitations on international offsets. The limit may be increased to 1.5 billion tons if insufficient domestic offsets are available. While international offsets will trade at 1:1 through 2016, starting in 2017 emitters must tender 5 international offsets for every 4 tons of U.S. compliance. According to the Committee, this trading ratio will reduce carbon emissions by up to an additional five percentage points below 2005 levels by 2020. The bill establishes four mechanisms by which other nations may dock into the U.S. carbon market:

- **Allowance trading, for nations with comparable cap-and-trade programs.** The bill authorizes the Environmental Protection Agency (EPA) Administrator, in consultation with the Secretary of State, to accept, for compliance purposes, allowances from cap-and-trade programs in other countries, provided that those programs impose mandatory absolute limits on the total tons of GHG emissions of those countries, and that the programs are at least as stringent as ours, including, importantly, comparable monitoring, compliance, enforcement, quality of offsets, and restrictions on the use of offsets. The allowances from these programs are tradable on a 1:1 basis.
- **Forest credits.** The bill authorizes the EPA Administrator, in consultation with the Secretary of State and the Administrator of the U.S. Agency for International Development (USAID), to enter into agreements or arrangements with countries on reducing emissions from deforestation. To be eligible for offset crediting, forest nations will have to demonstrate, beginning five years from the start of the



ENVIRONMENTAL DEFENSE FUND

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program (extendable eight more years in the case of small-emitting and least developed countries), reductions in total emissions from deforestation nationwide, or in their large-emitting states or provinces, from a baseline that results in zero net deforestation within 20 years. Programs in forest nations must be undertaken in compliance with rigorous monitoring and accounting standards, and in consultation with local communities, indigenous peoples, and other stakeholders. In addition, the bill sets aside 5% of the U.S. allowance pool and directs that allowance value be used to assist tropical forest nations in preparing to participate in this program, preserve existing forest stocks, and achieve supplemental reductions of 720 million metric tons in 2020, and a cumulative amount of 6 billion metric tons by 2025.

- **Sectoral credits.** The bill directs the EPA Administrator, in consultation with the Secretary of State, to prepare a sectoral crediting list – a list of nations with high GHG emissions or comparatively high levels of income, and of sectors whose emissions would be capped if they were in the U.S. For listed nations and sectors, the EPA Administrator may only issue credits if those nations/sectors adopt domestically enforceable sectoral baselines of absolute emissions set at levels that are below business as usual and are consistent with two degrees Celsius or 450 ppm, and then achieve absolute reductions from those baselines. Nations and sectors on the list that adopt voluntary, no-lose, sectoral intensity targets will not be able to sell offsets into the U.S. market.
- **Project credits.** The bill authorizes the EPA Administrator, in consultation with the Secretary of State, to issue offset credits for reductions from projects in nations that have not capped emissions, if the reductions are recognized by a body established pursuant to the UN Framework Convention on Climate Change (UNFCCC) that provides assurances of integrity equal to or greater than the U.S. domestic offset program. Starting in 2016, the Administrator may not issue project credits for projects in countries or sectors on the sectoral crediting list.

How does the bill address concerns about price volatility in the carbon market? The bill addresses price volatility in three ways.

- First, the bill builds on the base of already-authorized detailed national emissions inventories. Other nations establishing carbon markets have experienced price volatility when actual emissions turned out to be different than emissions projections made during the design phase of programs constructed in the absence of national emissions inventories. Congress addressed this volatility concern in 2008, when it authorized funds for EPA to build the national GHG inventory in advance of a national carbon market program.



ENVIRONMENTAL DEFENSE FUND

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- Second, the bill establishes a floor price of \$10/ton (in 2009 dollars) for carbon allowances auctioned. Consequently, it will not be possible for auctions to yield prices of less than \$10/ton.
- Third, as recommended by the U.S. Climate Action Partnership (USCAP), the bill authorizes unlimited banking of allowances, a two-year compliance period (which allows borrowing one year in advance), and a strategic reserve of allowances that will be available for auction if allowance prices exceed 160% of their three-year average. The reserve will be filled partly from allowances from future years, and partly by purchasing reductions in emissions from deforestation. In the event the allowance price exceeds the threshold for release of allowances from the strategic reserve, the mechanism for releasing reductions in emissions from deforestation requires emitters to tender those at a ratio of 5:4. The proceeds of any sales from the reserve will be used to acquire additional international offsets, resulting in additional reductions in carbon emissions.

Addressing international leakage. The bill contains detailed provisions addressing international carbon “leakage,” i.e. carbon emissions resulting from shift of industrial facilities or production from the United States and other nations with emissions caps to nations that are not capping their greenhouse gas emissions. These provisions should be read closely. To summarize them quickly: The bill specifies that it is the policy of the United States to work proactively under the UN Framework Convention on Climate Change and in other forums to establish binding agreements, including sectoral agreements, committing all major GHG-emitting nations to contribute equitably to the reduction of GHG emissions. It establishes U.S. negotiating objectives to include in those international agreements provisions both to address leakage, and to authorize nations to take domestic measures to address that leakage.

To discourage carbon leakage, energy-intensive, trade-exposed industries that make products like iron, steel, cement, and paper will receive free allowances to cover their increased costs. These allowances will phase out by 2035. In addition, unless an international agreement consistent with the negotiating objectives enters into force by 2018, or both the President and the Congress decide otherwise, an “international reserve allowance” program is created. Under that program, those who import into the United States energy-intensive products from nations whose sectors have not capped emissions or reduced their energy-intensity to comparable levels, will be required to submit special allowances to reflect the carbon emissions associated with the product’s manufacture. Imports from least developed countries and those with minimal emissions are exempted.

ⁱ The bill also caps some global warming pollutants that are substitutes for ozone-depleting chemicals.



ENVIRONMENTAL DEFENSE FUND

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ⁱⁱ The program is modeled on the acid rain trading title of the U.S. Clean Air Act Amendments of 1990, which has cut SO₂ emissions by 50%, three years ahead of schedule and at a fraction of projected costs.

ⁱⁱⁱ The bill allocates, from 2012 through 2021, 2% of allowances for adaptation and clean technology transfer to developing countries. Allowances allocated for these purposes will increase to 4% from 2022 through 2026 and to 8% thereafter. Half will be used for adaptation and half for clean technology transfer. Developing countries that can receive this support are those eligible to receive official development assistance under the guidelines of the Development Assistance Committee of the Organization for Economic Cooperation and Development (OECD, see www.oecd.org/dac/stats/daclist). For adaptation: The bill directs that priority be given to the most vulnerable countries, communities and populations, and the bill directs 40-60% of the adaptation funding to flow through multilateral institutions. The bill separately establishes an adaptation program within the United States. On technology transfer: To be eligible, a developing country must enter into an international agreement to which the United States is a party, under which the country agrees to take actions to produce measurable, reportable, and verifiable greenhouse gas emissions mitigation, or is determined by the U.S. to have in force national policies and measures capable of producing measurable, reportable, and verifiable greenhouse gas emissions mitigation; and has developed a nationally appropriate mitigation strategy that seeks to achieve substantial reductions, sequestration, or avoidance of greenhouse gas emissions, relative to business-as usual levels, and meets other requirements, including protection of intellectual property rights for clean technology. The bill directs that priority be given to the least developed countries.