

Statement by Mindy Lubber

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before the

United States Senate Committee on the Budget

“The Costs of Inaction: The Economic and Budgetary Consequences of Climate Change

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Chairman Murray, Ranking Member Sessions, members of the Committee, thank you for this opportunity to discuss with you the economic risks of climate change. My name is Mindy Lubber and I am the President of Ceres. Ceres is a national nonprofit organization mobilizing business and investor leadership on climate change and other global sustainability challenges. Ceres directs the Investor Network on Climate Risk, a network of 110 institutional investors with \$13 trillion of collective assets focused on the risks of climate change. Ceres also coordinates BICEP - Business for Innovative Climate & Energy Policy - a network of 31 companies advocating for strong clean energy policies that includes major firms like Nike, Mars, Starbucks, Owens Corning, Jones Lang LaSalle, eBay, VF Corporation and General Mills.

The diversity of companies in BICEP represents the profound diversity of impacts that climate change is having on the U.S. economy – and the American taxpayers. For apparel giants VF Corp. and Nike, climate change poses risks to cotton and other commodities that are being affected by reduced water availability and drought. For Jones Lang LaSalle and Owens Corning, the climate change poses risks to buildings and their enormous use of electricity and growing vulnerability to coastal flooding and rising insurance costs. For General Mills and Starbucks, climate change poses risks to coffee, corn and other crucial crops that are experiencing more

volatile growing conditions that oftentimes mean higher food prices. (We're seeing this right now, actually, with meat, fruit and vegetable prices all going up due to the prolonged drought in the West.)

Quite simply, climate change poses risks to every business sector and every American. The risks may vary, but they are being felt across our economy. That is why Ceres – and the companies and investors we work with – believe that the choice is NOT between protecting the climate and protecting the economy... We believe that without a stable climate, our economy cannot thrive.

The hundreds of companies and investors we work with all agree that climate change is a threat to their profitability and a threat to the global economy. These businesses are taking steps to prepare for the escalating impacts of climate change. They are pursuing sustainable technologies, such as using more renewable energy to slow climate change impacts and they are bringing their greenhouse gas emissions down. They are taking these steps because they believe the costs of not doing so are too great.

Ceres has done extensive research in the past decade on the many different ways that climate change is impacting our economy, hitting our wallets and creating bigger and bigger financial risks if actions are not taken.

Ceres has sponsored two reports, which are particularly relevant to today's discussion. In 2012 we published a report examining the growing costs and risks of extreme weather events; and last October, we published a report on the growing costs to taxpayers of inaction on climate change. I would like to include these two reports with my testimony for the record.

Ceres has identified five government disaster relief and recovery programs where the costs of inaction on climate change are most pronounced. They are federal disaster assistance appropriations, the National Flood Insurance Program, the Federal Crop Insurance Program, Wildfire Protection, and state-run insurance plans known as residual markets. Taxpayer bills and exposure for all of these programs are rising. Here are some numbers:

- First, with regard to federal disaster assistance appropriations, one conservative estimate puts the average bill that taxpayers can expect to pay at \$20 billion a year. That's funding that goes to help communities respond to disasters such as hurricanes, thunderstorms and floods. But one should recognize that in any given year one catastrophic event alone could cost over \$100 billion, causing that bill to the taxpayers to skyrocket. Hurricane Sandy, for example, cost Americans \$60 billion in disaster relief costs.
- Second, our National Flood Insurance Program is currently in debt to the U.S. taxpayers for approximately \$30 billion. In 2012, this vital program collected about \$3.6 billion in premiums and paid out over \$7.8 billion in Hurricane Sandy losses and other flood losses. While we'd like to think that Hurricane Sandy's devastating storm surge was an anomaly, it's not. Coastal flooding events are becoming more and more common, a result of rising sea levels and stronger storms, both of which are likely consequences of climate change. The average number of days per year that tidal waves have reached or surpassed flooding thresholds, that's a level when water begins collecting on surface streets – has more than tripled in many locations. Since 2001, water has hit these flooding thresholds an average of 20 days or more a year in several East Coast cities: Sandy Hook, N.J.; Atlantic City, N.J.; Annapolis, Md.; Washington, D.C.; Wilmington, N.C.; and Charleston, S.C.

The National Flood Insurance Program must increase premiums in these areas now prone to flood risks, or we can expect bigger program losses that American taxpayers will end up paying for.

Third, the Federal Crop Insurance Program, a vital program that helps our farmers manage their risks, has seen insured crop losses spike from an average of \$4.1 billion per year from 2001 through 2010, to a record-setting \$10.8 billion in 2011. The devastating heat waves and drought in 2012 shattered even that record, when the program paid out \$17.3 billion in crop losses

Fourth, wildfire protection costs have tripled since the 1990s. Wildfire seasons are becoming longer and more severe. In the past 10 years federal government wildfire protection and suppression costs have averaged over \$3 billion annually, compared to about \$1 billion annually in the 1990s. FEMA's fire management assistance grants have more than tripled over the same period to an average of over \$70 million annually. And state governments are spending up to another \$2 billion annually on wildfire protection on top of the unknown amounts that local governments are spending.

- And, finally, state-run insurance plans known as residual insurance markets are facing dramatically larger loss exposure as private insurers pull out of states, especially coastal states, facing major climate risks. These state-run programs, backstopped by state taxpayers ultimately, have seen loss exposure grows from \$54 billion in 1990 to \$884.7 billion in 2011. I will come back to these state plans in more detail shortly.

If there is a moment historians will look back on as the moment when climate change truly hit home in America, it will almost surely be 2012. Add up all of the costs that I just enumerated— federal crop losses, flood losses, wildfire costs and disaster relief – extreme weather events cost Americans more than \$300 per person in 2012 or \$110 billion all together.

Yet, despite these rising losses in recent years, our federal disaster relief and recovery programs have been slow to recognize that worsening climate impacts will drive up future losses to unsustainable levels. Instead of encouraging behavior that reduces risks from extreme weather events, these programs encourage behavior that increases these risks – such as agricultural practices that increase vulnerability to drought and new development in hurricane- and wildfire-prone areas.

Citizens are not only paying for inaction on climate change through the increased costs of these federal programs. They are paying for them at the grocery store. Prolonged droughts in California, the Great Plains and the Southwest, have diminished the US cattle herd to its smallest size since 1951, causing beef prices to increase by 10% from a year ago. In decisions which have devastated many Texas communities, Cargill and other major livestock producers have been forced to shut down feedlot operations due to - as a Cargill spokesman put it – the “drought-depleted beef cattle supply.”

Extreme weather is also contributing to prices for fresh fruits and eggs rising by five to six percent – twice the 2.8% rate of food price increases over the past 20 years.

According to the latest National Climate Assessment, released in May, the negative effects of climate change on agricultural production in the Midwest and Great Plains will far outweigh any positive effects. Corn production, the nation's biggest agriculture sector by far, is especially vulnerable to higher temperatures, changing rainfall patterns, soil erosion and water shortages that are widely predicted from climate change.

Competition for water, which is becoming ever more scarce in many US regions due to drier conditions, is especially pronounced in arid regions of the country, such as Southern California, the Southwest, and Texas. Ceres produced another study this year, "Hydraulic Fracturing and Water Stress: Water Demand by the Numbers," that points out how hydraulic fracturing is increasing competitive pressures for water in some of the country's most water-stressed and drought-ridden regions. The report's review of hydraulic fracturing well data showed that 55 percent of the wells were in areas experiencing drought and 36 percent were in regions with significant groundwater depletion –key among those, California, which is in the midst of a horrific drought and Texas, which has the highest concentration of shale energy development and fracturing activity by far. Barring stiffer water-use regulations and improved on-the-ground practices, the industry's water needs in many regions are on a collision course with other water users, especially agriculture and municipal water use.

As climate change increases the risks of extreme weather events, our federal and state disaster relief and insurance programs will become increasingly unsustainable. By one estimate, the net present value of the federal government's liability for unfunded disaster assistance over

the next 75 years could actually be greater than the net present value of the unfunded liability for the Social Security program.<sup>1</sup>

Ceres has been working closely with state regulators in the insurance industry to set new standards and expectations that will enable insurers to plan for escalating climate risks while moving companies and individuals toward low-carbon activities. A growing number of companies in the sector recognize that climate change can have a devastating impact on their industry. They are the proverbial canary in the coal mine on climate change's impact on the economy.

Our report on the growing costs and risks of extreme weather states that, inevitably, as there is more weather damage, insurance companies, especially property & casualty firms, will charge more for their products. Ultimately this could lead to fewer people being able to afford insurance, as well as solvency problems for insurers themselves.

Insurance commissioners across the country are working with insurance companies to make sure that they are adequately addressing climate change in their risk profiles. From Washington to California to New York, insurance commissioners are mandating that major insurers disclose how they are managing the risks posed by climate change.

Let me ask you, if you were told that there was a 98% chance that the boat you were about to board would sink, would you still climb aboard? The insurance industry has done this calculation with regard to climate change and they are not willing to take the risk that the 2% of

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<sup>1</sup> J. David Cummins, Michael Suher and George Zanjani, "Federal Financial Exposure to Natural Catastrophe Risk," chapter in "Measuring and Managing Federal Financial Risk," National Bureau of Economic Research, edited by Deborah Lucas, February 2010

scientists who are skeptical of climate change are right. They are preparing their industry for the long-term effects of severe weather due to climate change.

Unfortunately, from the taxpayers' vantage point, there's a down side to insurers' growing preparedness in risk-prone areas. Private insurers are especially leery of providing coverage in coastal areas vulnerable to more powerful hurricanes. In many regions, -- Florida, in particular -- they've largely withdrawn from homeowners insurance markets because they were unable to charge substantially higher premiums. As a result, the states themselves are bearing the risks of providing homeowners insurance to millions of homeowners. Many coastal states are becoming so-called 'insurers of last resort.' What this means is that if a calamity strikes, state taxpayers will end up paying the bills.

According to the Government Accounting Office, from 1970 to 2010 state run insurance plans for those who cannot purchase insurance in the public market -- so-called FAIR and Beach Plans -- experienced explosive growth both in terms of policy count and exposure value. Total policies in force in the nation's FAIR, Beach and Windstorm Plans combined have more than tripled from 931,550 in 1990 to a record high 3.3 million in 2011. And as I said earlier, total loss exposure in these plans surged from \$54.7 billion in 1990 to a record \$884.7 billion in 2011—an increase of 1,517 percent -- or 15 times.

At Ceres, while we clearly see the risks -- both environmental and financial -- from climate change, we also see opportunities in tackling the problem. Building a low-carbon economy will mean new job development and more investment in new businesses. We're also seeing compelling evidence of more and more American companies acting on climate change -- and doing so affordably.



Last month, Ceres, Calvert and the World Wildlife Fund issued a “Power Forward 2.0” report showing how clean energy is becoming the mainstream for U.S. corporations. Sixty percent of the Fortune 100 companies have goals for renewable energy or greenhouse gas reductions. Through these initiatives, the 53 Fortune 100 companies reporting on climate and energy saving targets have collectively saved \$1.1 billion annually and decreased their annual CO2 emissions by the equivalent of retiring 15 coal-fired power plants.

We’re also seeing impressive progress in the electric power sector, the largest source of CO2 emissions in the country. Last week Ceres published a report benchmarking the country’s largest 32 electric power companies on their energy efficiency and renewable energy programs. The report shows that electric utilities all over the country are delivering renewable energy and energy efficiency at scale. We found many strong performing utilities from all parts of the country such as Xcel Energy, a top ranking utility on renewable energy, which operates in Colorado, Minnesota, and Texas. And Pinnacle West in Arizona, which is achieving impressive energy savings for customers in a state that only recently began to set goals for these resources.

The report highlights recent studies showing that energy efficiency continues to rank as the lowest cost resource compared to all other electricity supply options. The report also cited a recent National Renewable Energy Lab study showing that renewable electricity has added only about 1 percent to electricity costs across the country. And renewable energy prices are continuing to drop at a rapid pace.

Tackling climate change offers one of the greatest economic opportunities of the 21<sup>st</sup> century—spurring innovation, creating good-paying jobs, and strengthening corporate bottom lines—all while protecting the economy from potentially catastrophic climate change impacts.

More than 850 companies recognize this climate opportunity and are signatories to Ceres' [Climate Declaration](#).

To truly seize this opportunity, we need to dramatically boost investments in clean energy and energy efficiency over the coming decades to cut carbon pollution and combat the worst effects of climate change. Globally, we need to achieve what we at Ceres call the Clean Trillion—\$1 trillion in clean energy investing annually over the next 36 years. Such investments globally are now at about a quarter-trillion dollars a year. So we have a long way to go. Meanwhile, the fossil fuel industry is spending over a half-trillion a year looking for new fossil fuel reserves that were we ever to burn them all would put us on a catastrophic path. The longer this paradigm continues, the longer we wait to tackle climate change with a vengeance, the more the costs—economic, human and environmental—will balloon.

I often talk about how when I had children, my whole outlook changed with regard to the environment. I really understood the importance of keeping the world safe for my kids and their kids.... Creating a world where they can live healthily whether they choose to live on Boston or Botswana. I feel the same way about the economic future of the world and of our country....and I believe they go hand in hand. And I am sure that you members of the budget committee think about the importance of a strong economic future for our country every day. I would submit to you that a strong economic future depends on our country's response to the risk of climate change.