This ignores that the amendment states biomass is renewable and carbon neutral ONLY if it doesn’t cause land-use conversion.

The relevant measure isn’t carbon emitted upon release, but the net carbon emitted and captured by the full carbon cycles of coal and biomass over a scientifically appropriate timescale.

As stated in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, "in the long term, a sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fiber or energy from the forest, will generate the largest sustained mitigation benefit.”

While forest biomass energy may be renewable over the long-term, it is not a low-carbon source of energy like solar panels. Using the same amount of land, solar panels produce up to 80-times as much electricity as wood burning with no emissions at all. Yet with this amendment, both might receive the same subsidy under the Act. Furthermore, fossil fuel emissions associated with producing biomass (harvesting, chipping, drying, pelletizing and transporting) are equivalent to 20-24% of direct emissions, and under this legislation these emissions are unaccounted for.

Granting carbon amnesty to forest biomass burning for energy could lead to significant depletion of US forests. The potential implications of declaring carbon neutrality for forest biofuels are great because even small quantities of bioenergy require large quantities of wood. The US Energy Information Agency estimates that for each Gt of biomass burned, an additional 18% increase in US forest harvest is required. This policy would also encourage the destruction of forests in developing countries that would see the US as an export market. This would undermine international attempts to protect tropical forests in these countries through the programs agreed to in Paris.

Legislating scientific facts is never a good idea, but is especially bad when the “facts” are incorrect. We urge you and other members of the Senate to reconsider this well-intentioned legislation and eliminate the misrepresentation that forest biomass energy is carbon-neutral.

We respectfully request an opportunity to inform you and other Senators of the scientific evidence for the appropriate accounting of forest bioenergy emissions. You could perform a great service by pushing and enacting legislation that effectively addresses climate change by enhancing the capacity of forests to reduce the amount of carbon dioxide entering the atmosphere. Any number of us would be willing to testify or to assist you and your staff in meeting the climate challenge with scientifically sound actions.

Sincerely,

Philip B. Duffy, Ph.D. President and Executive Director Woods Hole Research Center p Duffy@whrc.org 508-444-1504

Prof. Emeritus William R. Moonaw, Ph.D., Co-Director Global Development and Environment Institute, Tufts University william.moonaw@tufts.edu 617-335-5994

William Schlesinger, Ph.D., President Emeritus, Cary Institute schlesinger@caryinstitute.org

cc: Olivia Kurtz, Senator Collins’ Energy legislative Council, James Springer, Senator King’s Energy legislative Council, Anne Kane, Senator Klobuchar’s Energy legislative Council and Blaise Sheriden, Senator Franken’s Legislative Council


1. According to USDA data, the total volume of trees growing in U.S. forests has increased 50% since 1953. The carbon stored in these forests has increased at a corresponding rate.

2. Additionally, current markets consume only a small percentage of forest inventory annually.

3. Biomass energy markets provide additional income to forest owners that they can reinvest to plant more trees, protect forests from insects, disease and fire, and grow larger, more resilient trees.

The facts speak for themselves: U.S. Timberlands are managed in a sustainable growth and harvest cycle, and are presently growing at MORE THAN TWICE the rate of harvest. Biomass markets, like other forest products markets, enable private forests to provide sustainable carbon benefits over the long term.

Competition is a cornerstone of free markets, and demand for forest products provides strong economic incentive to maintain forestlands. The loss of forest bioenergy markets diminishes the value of forests and places greater pressure on forest owners to convert them to other uses causing a loss of carbon storage, wildlife habitat, recreational opportunities and other important public benefits.

Healthy markets mean healthy forests: