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## For Immediate Release

### NEW SUSTAINABLE ENERGY DEVELOPMENT PLANS FOR GOVERNMENTS OF CAMBODIA & LAO PDR COULD SAVE THE MEKONG RIVER

**[San Francisco, CA, April 2018]** The Mekong River in Southeast Asia is the 8<sup>th</sup> largest river in the world, traversing eight countries with some 60 million people. It is at once the most productive river fishery in the world, providing a valuable source of food (up to 80% of protein consumption) and income for Mekong residents, and also the site of the most intense dam building in the world, to produce the power needed to accelerate development particularly in the countries of Cambodia and Laos, which are among the poorest countries in the world. On the Xe Kong River in Laos, the last undeveloped major tributary in the Mekong River Basin, seven hydropower dam sites are being actively studied and the lowest six are located right in the prime migratory fish spawning habitat of the mainstream river. In Cambodia, the proposed 2600MW Sambor dam could literally kill the Mekong River by creating a complete barrier to migratory fish and sediment that replenishes the Mekong Delta and nourishes the food chain of the Tonle Sap Great Lake.

Until recently, it was presumed that this tension between extraordinary natural values and the economic development imperative forced unsustainable courses upon the leaders of these countries. **Two new studies of power development alternatives now show that it is possible to have both power and fish.**

The Natural Heritage Institute (NHI, [www.n-h-i.org](http://www.n-h-i.org)), a San-Francisco-based conservation organization, worked under a formal agreement with the Kingdom of Cambodia and in full collaboration with the Government of Lao PDR to develop sustainable hydropower development plans that include a solar/hydro alternative that would supplant the need for new dams, thereby protecting the highly productive Mekong fishery and keeping sediment and nutrients flowing to the delta, which are necessary to prevent the delta from disappearing completely due to climate change.

For both countries, a key part of the strategy to avoid destructive new hydropower dams is to increase the power output from existing ones by integrating floating solar panels into operations of the hydropower reservoir. The assessments show that such hybrid renewable power facilities would double the power generation capacity while improving the reliability of power supplies. This technique would be superior to the new hydropower alternatives in terms of cost, timeline for construction, and avoidance of financial risks while causing zero environmental damage.

The solution proposed in NHI's [Sustainable Hydropower Master Plan for Xe Kong Basin](#) is to “solarize” the Xekaman 1 reservoir, owned and operated by a Vietnamese power company, which would be the centerpiece of a strategy to replace all of the mainstream dams proposed for the Xe Kong tributary. For the Cambodia strategy, set forth in the [Sambor Hydropower Dam Alternatives Assessment](#), the Sambor dam would be replaced by a turning the Lower Se San 2 hydropower project into a hybrid solar/hydro project, leaving the portion of the Mekong mainstream that experience the greatest movement of migratory fish on earth unobstructed. That reservoir is owned and operated by the same investors who wish to build the Sambor dam. Together, these strategies would allow free passage of both fish and sediments and nutrients through this portion of the Mekong River from the headwaters to the South China Sea.

The free flow of sediment is needed to maintain and replenish the Mekong Delta in Vietnam, which according to the IPCC is one of the three major delta systems in the world most vulnerable to sea level rise, with its attendant storm surges and salinization. Sambor dam would capture all of the bedload and 60% of the suspended sediments. The delta is home to 20 million people, produces half of the rice for Vietnam, the world's second largest exporter, and is an epicenter of fish farming. Its survival depends on the adoption of the NHI alternative.

NHI's studies have been accepted by the highest levels of the governments in Cambodia and Laos. The “Sustainable Hydropower Master Plan for the Xe Kong Basin” was recently endorsed (16 February 2018) by the Prime Minister of Lao through an official directive to the relevant line ministries to adopt and implement the findings and recommendations of NHI's Master Plan as the basis for further hydropower development for the entire nation.

NHI's templates for sustainable hydropower power development in the Mekong countries may now be propagated into other river basins that are similarly characterized by extraordinary natural values and intense development pressure. There are today over 8,000 large hydropower dams operating around the world, which supplies about 20% of power generation globally. If all of these were retrofitted with floating solar arrays in just the way that the projects in Cambodia and Laos will illustrate, the increase in renewable power would be huge. According to the IEA Renewables 2017 Report, “new solar PV capacity around the world grew by 50% in 2016, reaching over 74 GW, and for the first time surpassing the net growth in coal” (<https://www.iea.org/topics/renewables/>).

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**To request NHI's full reports and for more information, please contact Gregory A. Thomas: [gat@n-h-i.org](mailto:gat@n-h-i.org)**