Cover: Upper impoundment, Chicopee River at Collins Hydroelectric Project (LIHI #88), Wilbraham, MA. Owned by Ampersand Energy Partners, LLC.
This page: Lowell Hydropower (LIHI #142), Merrimack River, Lowell, MA. Owned by Boott Hydropower, LLC., a subsidiary of Enel Green Power North America, Inc.
8% growth in 2018. 136 active certificates in 22 states on 83 rivers, representing 11% of eligible US hydropower.

Nearly one third of Certificate holders go above and beyond their regulated requirements.

Applications processed in 2018. 29 reached decision - 10 new projects certified and 19 re-certified.

93% of certificate holders have renewed since 2000.

Total MWh generated annually by Certified hydropower facilities, powering 1.7 million average US homes and avoiding 1.3 million metric tons of carbon emissions.
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Dave Youlen, (retired) Eagle Creek Renewable Energy (NY)
Since its inception, the Low Impact Hydropower Institute (LIHI) has had a three-part mission to (1) develop low impact criteria for hydropower, (2) execute a low impact certification program, and (3) educate the public about low impact hydropower. In the past, we have focused, and had much success, on the first two parts of the mission. In 2018, we made a concerted effort to better incorporate the third part of our mission into our work so that more people understand the critical role that low impact hydropower plays at the intersection of renewable energy, the hydropower industry, and environmental quality.

As climate change continues to take top billing in political debates, drive public policy, and be a cornerstone of corporate responsibility, LIHI must continue to be a strong voice for the importance of both hydropower and healthy rivers. LIHI began to expand its outreach activities to provide guidance for anyone wanting to engage with a low impact, reliable, renewable power source. Through these efforts we are working to bring increased awareness, and therefore value, to our Certificates.

LIHI strengthened and diversified the perspective of our governance in 2018. While bidding goodbye to Patrick O’Connor who moved to a new role within the hydropower industry, we welcomed Lisa Zarek, formerly CFO of Brookfield Renewable Energy Group, and Rick Glick, an attorney with extensive experience in the hydropower world to our Governing Board. Andrew Locke of Essex Hydro and Jon Petrillo of Gravity Renewables joined our Advisory Board. Early in 2019, we also welcomed Brenda Pracheil, a fisheries biologist at Oak Ridge National Labs to the Governing Board and Todd Wynn of Hull Street Energy to our Advisory Board. All of these new and existing board members serve on active and engaged committees that provide our staff with substantive support.

As we look toward the future, we inevitably reflect on our past. A big part of LIHI’s current success is directly attributable to Mike Sales who served our organization in many capacities – from Executive Director to valued advisor. Mike passed on January 1, 2019 surrounded by his family. He is missed, but his contributions and dedication to LIHI and our mission live on in our work.

LIHI continues to be a strong organization fiscally as well as structurally. We look forward to building on this in 2019 and beyond.

John Seebach, President
Shannon Ames, Executive Director
The Low Impact Hydropower Institute (LIHI) is a non-profit 501(c)(3) organization dedicated to reducing the impacts of hydropower generation through the certification of hydropower projects that have avoided or reduced their environmental impacts pursuant to LIHI’s eight science-based criteria.

Hydropower dams are located on many of our most important rivers and streams. These dams can create renewable energy, but can also produce significant adverse impacts on fish, wildlife and other resources. Our goal is to improve river systems through our Hydropower Certification Program, a voluntary program recognizing hydropower that engages in environmental, recreational and cultural stewardship.
Sometimes a hydropower project is a labor of love. The Ice House dam has been in use since the 1790s and was used as a reference marker in laying out the towns. In 1907, an electrical powerhouse was installed at the dam that operated trolley cars until the 1920s, and subsequently, ice-making machinery. During the 1970s, the powerhouse was destroyed by fire. Due to poor economic conditions in the residential ice business, the Project ceased operations in the 1940s. The powerhouse was restored by a father-daughter team. An example of pre-operation certification, the project was certified in 2009 but commenced operations in 2012. With its Certification, the 280 KW facility profits from the Massachusetts Renewable Portfolio Standard qualifying as a Class I resource. The power generated goes to the town of Ayer. Ice House is a good example of the importance of the revenue from programs like Massachusetts' RPS and a prime example of how beautiful hydropower can be.
FALLS CREEK HYDRO
LIHI Certification #4
Falls Creek H.P. Limited Partnership, Owner
Certified, 2002
Willamette National Forest, Oregon

Falls Creek has a long history of proactive engagement with the community. For the last 25 years, staff have hosted area school children on a creative, fun tour of the Project, teaching about hydropower, environmental resources, energy conservation, and the history of the local area. Staff also conduct tours and campfire presentations for visitors to the nearby National Forest campground. As demonstrated by the touching thank-you cards received by Falls Creek every year, their efforts are a cherished part of the public school curriculum, and earned Falls Creek Hydro an additional 3 years of Certification.

By going above and beyond basic criteria requirements, projects can meet PLUS standards and earn up to five additional Certification years.
Locations of LIHI Certified Hydropower and the markets they benefit from

Although often limited by factors such as size and age, LIHI Certified hydro has access to multiple markets across the US.

Certificate Stats

Size:
65% Certified projects are <5MW, 18% 5-30MW, 10% 30-100MW, and 8% are >100 MW.

Place:
17% of Certs are in the West, 65% in New England, and 13% in the rest of the country.

Capacity:
45% of Certified Capacity is in the West.
2018 was a strong financial year for LIHI. As our audited financial statements (available on our website) demonstrate, we were able to reduce expenses while maintaining a strong program. Our resources are primarily directed to program related expenses (83%) and we continue to concentrate on ensuring robust financial systems and oversight.
If it’s LIHI Certified, you know it’s Low Impact

Promoting Healthy Rivers and Green Power

Interior, Lowell Hydroelectric Project dam (LIHI #142), Lowell MA. Owned by Enel Green Power North America LLC.