



# Sustainability Action Plan

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# Table of Contents

- Firm History and Philsophy.....1
- Commitment .....2
- Green Firm Operations.....3
- Design Process.....4



SHI Arts Campus  
Kevin Jeffery Photography

## Firm History and Philosophy

MRV's history in Southeast Alaska began back in the 1930s when firm founder Linn Forrest came to Alaska with the Civilian Conservation Corps. He was instrumental in the reconstruction of many of Southeast's Tlingit and Haida architectural treasures, which were badly in need of restoration by the early 20th century. Linn sought to preserve the cultural history of these places – documenting, photographing, and ultimately writing a book about his findings - while never losing sight of the people for whom this architectural heritage was also a personal heritage. This legacy has continued at MRV through the years, including renovation work on several cultural icons including the Chief Shakes House and the Chief Son-i-Hat House. (See image to right)

MRV Architects, firmly rooted in the rugged and remote setting of Juneau, Alaska, has long drawn inspiration from the unique challenges and opportunities that this maritime region presents. Juneau, surrounded by the vast and untamed wilderness of Southeast Alaska, offers a multifaceted tapestry of experiences – from its awe-inspiring natural beauty to the powerful forces of nature, and the rich cultural heritage that has shaped this land for generations.

In this environment, MRV Architects' design philosophy is deeply intertwined with a profound respect for nature, site-specific opportunities, and the cultural underpinnings that have sustained the Tlingit and Haida Native peoples. They provide a strong and living cultural presence in this unique setting.

MRV Architects embraces concepts of a circular, sustainable lifestyle, prioritizing environmentally responsible practices, minimizing the impact on the delicate surrounding ecosystems, and ensuring that their creations are not only aesthetically pleasing but also contribute to the long-term preservation of this extraordinary place called Lingít Aaní.





## Commitment

Given this setting and background, MRV Architects is committed to promote a sustainable and environmentally-conscious design practice, and exemplify best practices wherever possible. Though this may increase initial construction costs, we are convinced that long-term benefits of comfort, energy savings and lower maintenance costs make this a supportable goal for many clients.

We also believe that architects must play a proactive role in the shift to a “circular” design and production model. In a material-intensive industry, designers have a responsibility to ensure that structures are built with future generations of owners in mind.

The three lead architects at MRV, Zane Jones, Paul Voelckers, and Spencer Stekoll, are LEED AP certified by the U.S. Green Building Council. The Evergreen Building, our mixed-use office building, was the first private building in Alaska to be LEED certified, an early demonstration of our commitment to demonstrating change, and really working the details to achieve it. We have subsequently been involved in numerous certified buildings, including prominent LEED Gold examples. All of our major work, LEED certified or not, attempts to integrate the best environmental practices and stewardship possible for a given client and opportunity.

## Green Firm Operations

Our office is located in the Evergreen Building, which we designed to LEED Silver status in 2008. The building project reflected a comprehensive renovation of an older doctor's office, including the addition of a new second story for private apartments.

The first moves were to redo the entire building envelope to reflect best practice standards, including the addition of board insulation to stud walls, all new cladding and weather barriers, all new triple glaze windows, and the replacement of oil boilers for electric heat. All commercial and residential spaces were provided with new ventilation through ducted HRV systems.

The building is equipped with low-flow toilets and sinks, high-efficiency lighting, broad use of natural daylighting. Much of the exterior structure, including exterior walls, foundation, floor, and roof, were re-used. Over half of the construction waste materials was diverted from the landfill with donations and reclamations of many products. All materials were low-voc, with substantial recycle content where possible.

**On-going MRV office practices and next steps:** The Evergreen Building is in walking distance of Downtown Juneau and is conveniently served by public transit. Transit, walking, or biking to work is strongly encouraged. Some charging for resident electric vehicles has also been implemented.

With so many of our projects based in small communities in Alaska, we have expanded our remote meeting capabilities first pioneered through Covid. MRV has a very capable video meeting system, making it comfortable for both zoom and hybrid meetings. This has allowed us to limit the amount of flying and time inefficiencies associated with unnecessary travel to remote settings.

On a day-to-day basis, our practice builds in simple but meaningful steps, such as careful recycling, and accommodating many indoor plants to help improve air quality. The landscaping around the building also includes lush greenery that is water-efficient with a small pond that is home to goldfish in the warmer months of the year.

At the time the Evergreen Building was first renovated, demolishing oil heating and converting the building to all-electric was a major step. In the 15+ years since that step, heat pump technology has substantially improved for Alaska applications. Those changes, in combination with Juneau's enviable hydroelectric supply, now make further conversions to heat pump heating and hot water production the next logical step. That conversion, as well as expanded charging station capability, is likely within three years.





Cordova Center, LEED Certified  
Ken Graham Photography



USFS Research Lab, LEED Gold  
Ken Graham Photography

## Design Process

MRV is committed to the 2030 Challenge, with the goal of being carbon-neutral by 2030, and integrating the highest practical degree of sustainable and circular design materials and products in our practice from today moving forward.

**Data Tracking:** To track our data, we will be partnering with our engineering team to monitor our projects' energy performance. We will also be implementing an embodied carbon calculation tool into our early design process. Every year we will be reporting our data to AIA 2030 DDx (Design Data Exchange) to document and track our performance.

**Predesign:** Early concept development includes site analysis of existing conditions, capitalizing on passive strategies such as prevailing winds and potential of solar heating through glazing and orientation. Clients are made more intimately aware of the firm's 2030 Commitment strategies and goals in this stage as well.

**Schematic:** On most early projects of substantial scale (\$5 million and above), MRV proposes the use of early life-cycle energy modeling, working in combination with experienced engineers, and exploring a variety of envelope variables and heating system variables.

**Design Development and Construction Documents:** These two phases will represent the biggest change for MRV Architects. While we do have working experience with generalized early energy use analysis, we have not integrated detailed energy modeling which considers the full carbon impact of alternate design detailing. This will reflect our largest challenge, and learning opportunity. This starts with integrating appropriate software that can extend our Revit building modeling, and link as well to associated engineer energy models.

**Construction + Post Occupancy:** MRV Architects has reasonable experience in the construction and post-occupancy phases of work relative to quality control and confirmed system performance. Most of our larger projects, certainly LEED projects, have a mandated rigorous commissioning phase which are conducted in tandem with our relevant engineers. MRV will need to expand our process to integrate greater review and accountability for carbon certification, chain of custody, and the like.

