



Communications
Narrative

Missouri
University of
Science and
Technology

Mission

The Missouri S&T's Solar House Design Team empowers the next generation of leaders to build a sustainable future. This is accomplished by developing a sustainable, innovative, and original design for the U.S. Department of Energy Solar Decathlon. The team possesses a wealth of experience from six previous competitions which provides opportunities for students to learn from previous designs. Each new home improves the university, community, and environment through focused research, public education, and sustainable design. By fully understanding the triumphs and mistakes of past homes the team has designed SILO.

The team uses hands on learning to reach its goal of promoting sustainability in a hands-on way. The team provides students a way to practice what they learn and share their knowledge. Team members encourage one another to try and implement innovative practices and designs that interest them.

Branding

SILO is more than just a self-sustaining, net-zero home. The "S" in SILO stands for smart, represented by a home automation system that enables the homeowner to live efficiently and at ease. "I" stands for innovative; the numerous sustainable technologies include the solar array, greywater reclamation, and on-site energy storage. "L" represents living. The home's abundant greenery and modern appliances combine for comfortable, smart living. Additionally, ample sunlight, clean air, and relaxing atmosphere create the "O" in SILO, which stands for oasis. Together, these features combine into a Smart Innovative Living Oasis, the ideal experience for any homeowner.



Smart Innovative Living Oasis

In the logo itself, there are many symbolisms. To represent innovation, a modern font is used. The word SILO in its normal usage describes a grain bin. However, in the design, the word shows that the design comes from the farmhouse lifestyle. The curved features of a modern aluminum silo are implemented into the roof. Finally, the logo paints a silhouette of the house.



Connecting the team with the six previous solar houses is the sunplug, and the motto "Rise With Us." The logos build on the team's message of using the sun's energy to empower the team and the world around us.



Rise with us.

Website

The team website is used to communicate what the design team is about and the current home. It gives a glimpse into the organization, shows what has been accomplished, and how students and companies can become involved. On the 'Home' tab, the current project is displayed along with an explanation of the team's mission. The '2017 House' tab gives a detailed narrative of the current project, SILO. The next page showcases the Missouri S&T Solar Village which gives a glimpse into each of the six previous houses. Next, the 'Competition' tab explains what the Solar Decathlon details the challenges that SILO conquer. The 'Partners' tab shows companies and individuals who support the design team. Upcoming team events are showcased on the next page. Further on, the 'Contact' tab shows how to get in touch with the team and Missouri S&T. The 'About Us' tab shows the team, composed of many individuals volunteering their time to achieve a greater mission beyond themselves. The tab also gives insight into each of the team subteams and what they do. Continuing on the 'About Us' tab is a page that displays each of the officers, giving credit their services.

The team uses Facebook and Twitter as its main communication with the public and followers. Weekly posts give the public an opportunity to see

the activities of the team. Posts include green and environmental updates, construction photos, announcements, and milestones.

Construction walkthroughs and personal stories are displayed on the team's YouTube channel. Companies, students, and the public view the videos to learn more about the design team.

At Missouri S&T

Since the beginning of SILO in 2015, 1700 visitors have come to the villages at Missouri S&T. A wide range of people have visited including families, tour groups, professionals, prospective and current students as well as faculty and environmental activists. During these tours, they learn about and experience all six homes located in the villages.

After touring all homes in the village, the guide tells the visitors what is to come: SILO. The guide explains that SILO is a house for parents that no longer have kids living in the home. It is for a couple in their late 40's or early 50's who are ready to cut the unnecessary space, upgrade quality, and live sustainably. The guide continues and explains that SILO is designed for a scenic location in rural Colorado, but keeps the aesthetics of modern style. Using engineering styles of farmhouses and implementing greenery throughout the home, SILO will be in tune with nature. At the conclusion of the





tour, the visitors are given a booklet with more information.

The villages at Missouri S&T show people a wide variety of designs and features. The homes allow people to ask questions and learn how to apply sustainable techniques to their own homes and lifestyle. Having multiple houses within the villages displays strength, growth, and stability in the market for sustainable housing and living. The tenants of the village truly live as a community. They collect compost, grow plants in a greenhouse, and do more with less.

The Missouri S&T Solar House Design Team uses university events to reach out to the public. This outreach serves to educate about sustainable lifestyles and how to be a part of the design team. The team hosts socials at the solar villages, such as bonfires, movie nights, and egg dying to bring the community together and promote green living.

Social Media Links

<http://solarhouse.mst.edu/silo/>

<https://www.facebook.com/MSTSolarHouse/>

<https://twitter.com/> [@mosolarhouse]

<https://www.youtube.com/user/MOSolarHouseTeam>

Appendix A Onsite Public Exhibit Materials

Hand out: SILO Business Card



Smart Innovative Living Oasis

Missouri University of Science and Technology

Learn more at: solarhouse.mst.edu

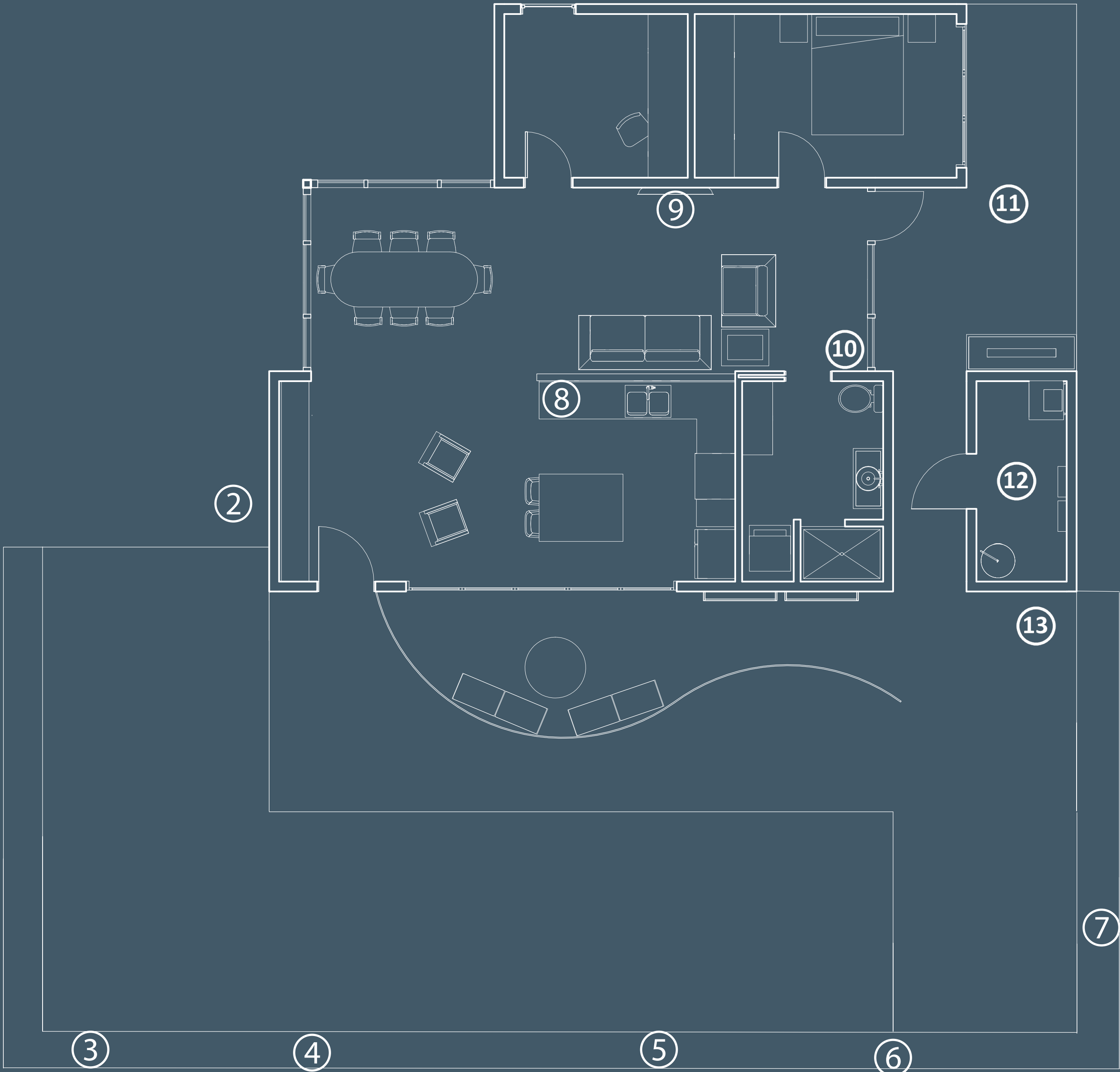
Don't forget to follow us!

[Facebook.com/MSTSolarHouse](https://www.facebook.com/MSTSolarHouse)

[@MSTSolarHouse](https://twitter.com/MSTSolarHouse)

Signage Layout

- ① Welcome
- ② Welcome to...
- ③ Ideal for...
- ④ Design Process
- ⑤ Floor Plan
- ⑥ Engineered Formula
- ⑦ Meet the Team
- ⑧ Quote 1
- ⑨ Quote 2
- ⑩ Quote 3
- ⑪ Solar
- ⑫ Greywater
- ⑬ Sponsor Sign
- ⑭ Thank You



SILO

Welcome!



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Welcome to...

SILO

Smart: An intuitive and interactive home automation system

Innovative: Water wall, greywater reclamation, and energy storage

Living: Abundant greenery and modern lifestyle

Oasis: Ample sunlight, clean air, and calming colors

SILO

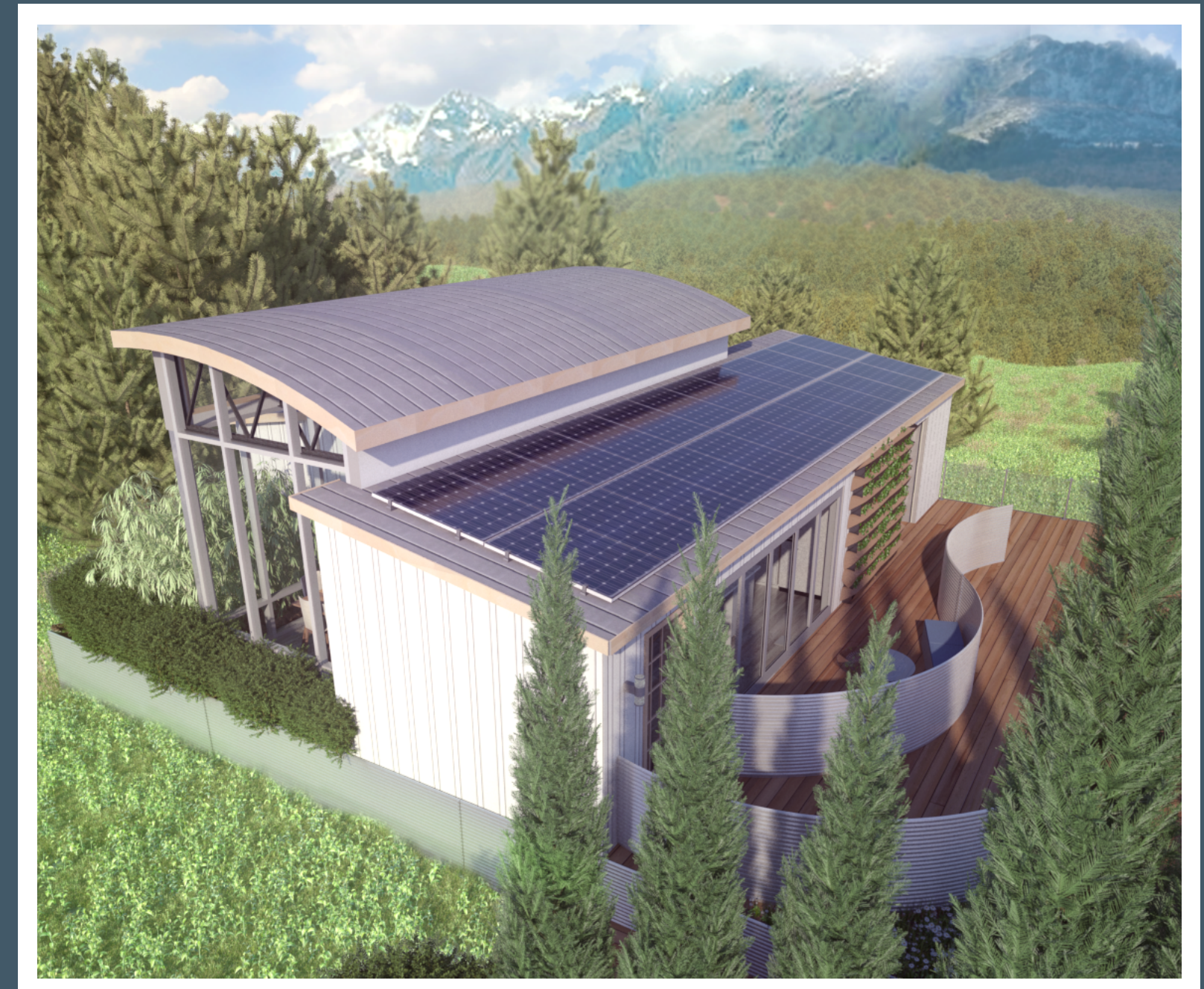
SILO is Ideal For...

A couple in their late 40s to early 50s.

Whose kids have left to forge their own futures.

Who want to live in scenic Colorado.

Who are ready to cut the unnecessary space, upgrade quality, and live sustainably.



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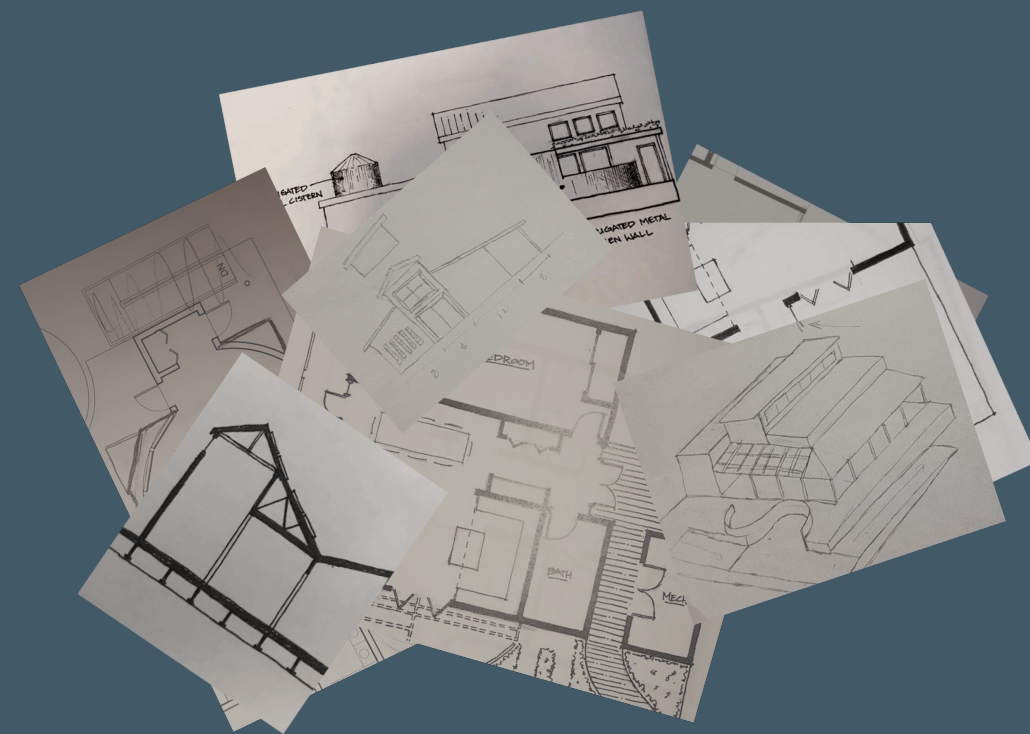
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SILO

Our Path to a Brighter Future



Large group brainstorming



Dozens of designs and floorplans



In-depth discussion and critical thinking



Professional review and advice



Completed design



Construction



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SILO

- ① Foyer
- ② Breakfast Nook
- ③ Kitchen
- ④ Dining Room
- ⑤ Living Room
- ⑥ Office/Spare Bedroom
- ⑦ Master Bedroom
- ⑧ Bathroom
- ⑨ Mechanical Room



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SILO

An Engineered Formula

$$\begin{array}{l} \text{Farmhouse} \\ \hline \text{Open Floorplan} \\ \text{Large Windows} \\ \text{Exposed Trusses} \\ \text{Entertaining Space} \\ \text{Connected to Nature} \\ \text{Outdoor Seating} \end{array} + \begin{array}{l} \text{Modern} \\ \hline \text{Energy Efficient} \\ \text{Solar Array} \\ \text{Neutral Colors} \\ \text{Modern Appliances} \\ \text{Technological} \\ \text{Minimalist} \end{array} = \text{SILO}$$



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SILO

Meet the Team

“The best part of our team is our drive for continual and impactful learning.”

-Luke Mueller, Project Manager

“The time for action is now!”

-Jennifer Nickel, Director of Design



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Meet the Team

“Solar House has given me a chance to get some “mud on my boots” and by that I mean during construction it had rained so much I was walking around in an inch or two of mud. It was messy but fun and rewarding work.”

-Colleen Kohrmann, Electrical Lead



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Meet the Team

“My time with the team has provided opportunities specific to my major that have left me immensely prepared for my present internship. My experiences managing construction, drafting designs, and facing time-sensitive challenges are valuable tools I would not find elsewhere.”

-Royce Ingram, General Member



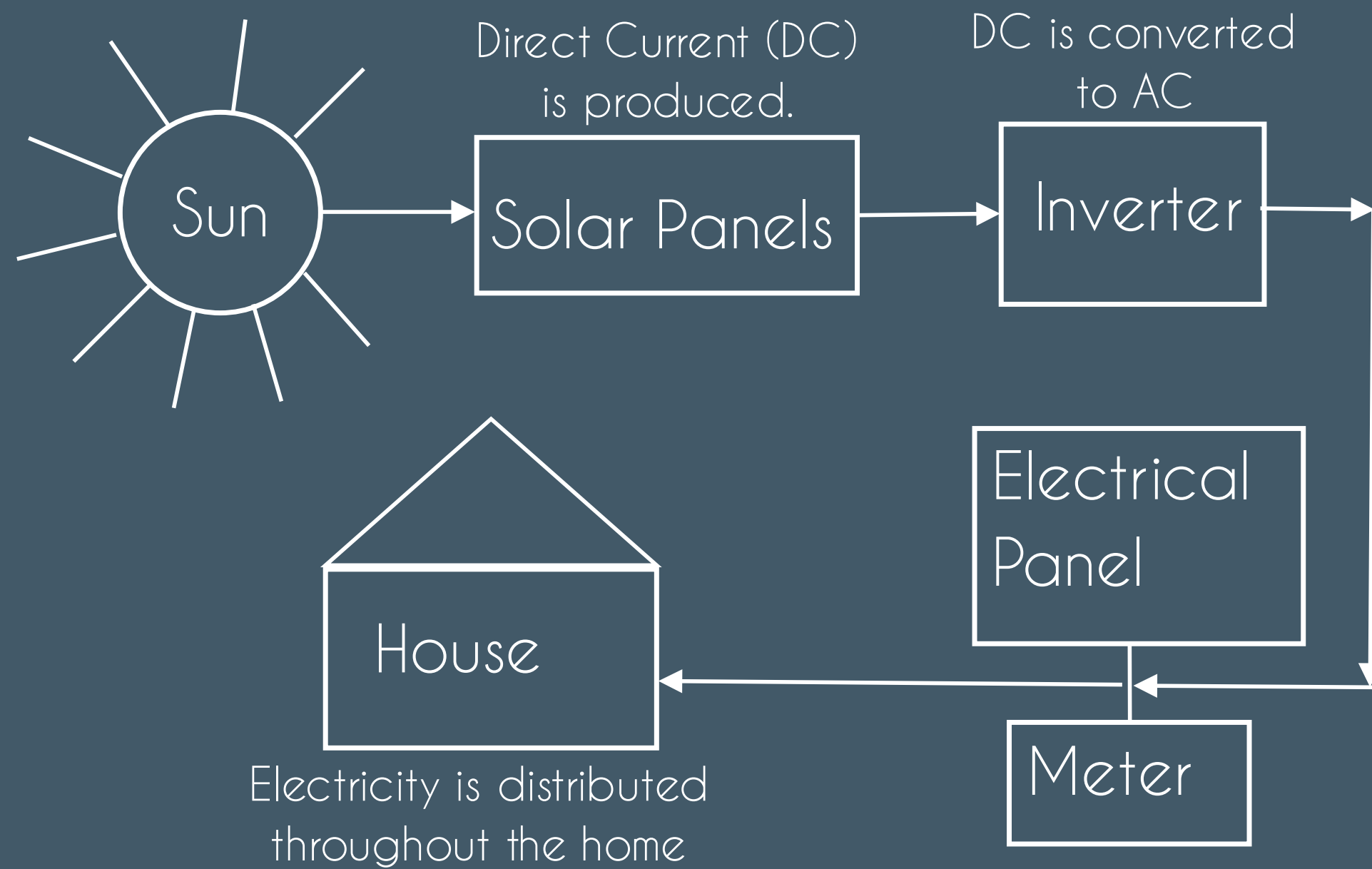
Meet the Team

“This is something that I dreamed in high school of being a part of. Now that I am a college student, my passion for building innovative houses has become a reality.”

-Jack Gibfried, Director of Public Relations



How Solar Works



Finances & Options

Solar panels located on personal property are exempt from property taxes, meaning the value added to your home by solar panels will not increase your property tax!

Utilities offer rebates for installing solar (varies by utility).

Solar equipment is exempt from state sales and use tax.

Don't want to be responsible for the cost of installation?

In a power-purchase agreement, a solar company owns the solar panels and you pay for the electricity at a fixed price.

There are many local grants, loans, and rebate programs to help offset the upfront costs of installing solar. Check your city!

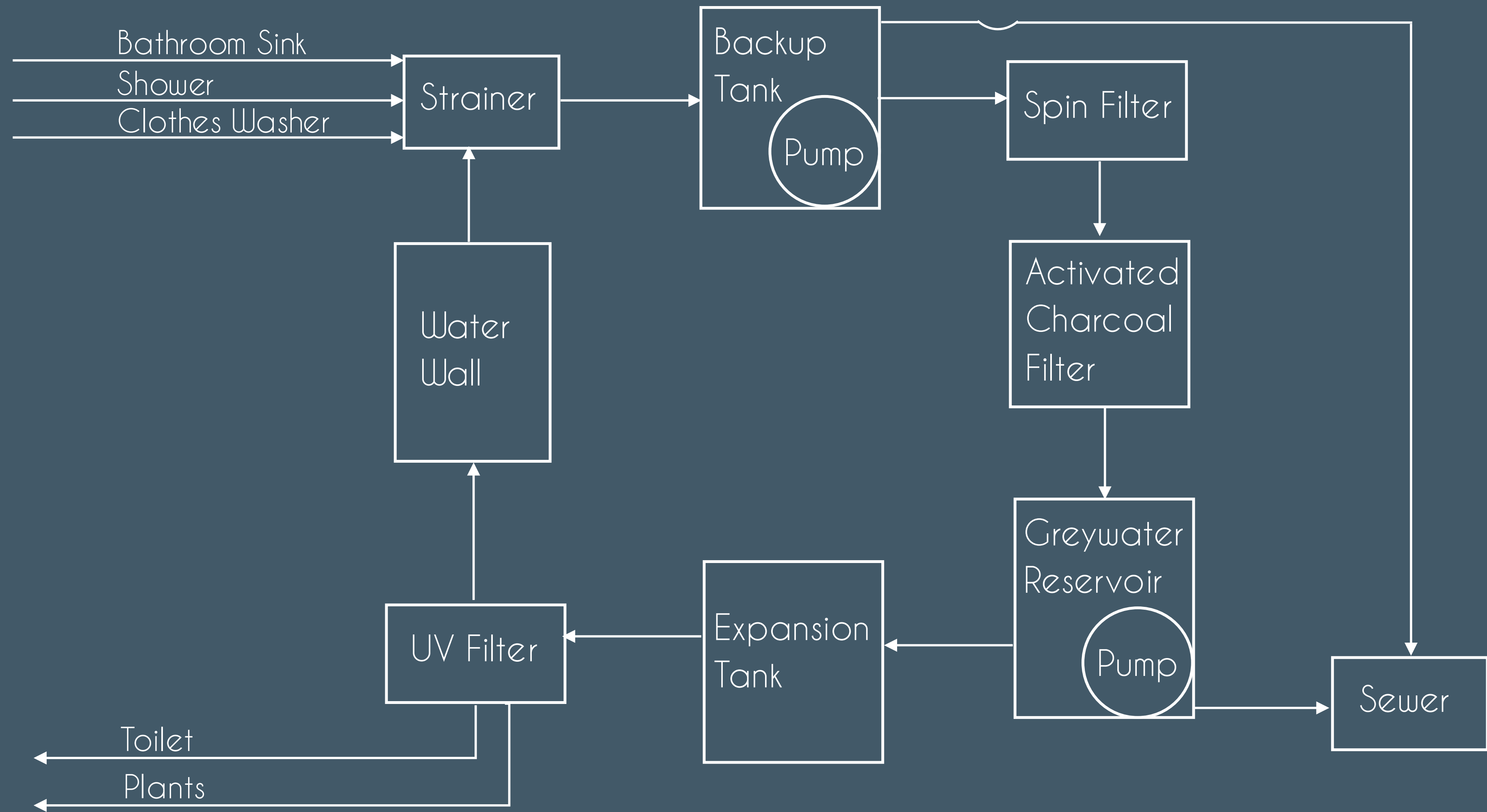
Xcel Energy offers "credit back" or payment for excess energy produced.

There is a 30% investment tax credit offered from the federal government.

Can't install solar for some reason? Research other ways to reduce your carbon footprint!



Greywater Reclamation



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