

Living Energy Farm
Wholistic Sustainability Weekend Immersive

When: Sept 28 - 30

Where: LEF, 1022 Bibb Store Rd, Louisa VA 23093

Event coordinator: call Debbie at 540 - 205 9815, email: livingenergyfarm@gmail.com

Have you ever seen a 100 year old battery that still works? Would you like to learn how to wire a homestead using DC electricity? Would you like to learn how to grow all of your own food in organic gardens and orchards? Would you like to be part of a movement to create sustainable villages?

Our third immersive scheduled for **Sept 28 - 30** and it will be focused on energy self sufficiency and building DC micrgrids like we have at LEF. LEF's integrated village economy uses high-voltage DC daylight drive motors. Our lighting system uses very durable nickel-iron batteries. We will teach you the basics of electricity, and show you how to wire solar electric panels and batteries, both high voltage and low voltage systems. We will show you how to put together battery banks, and explain the difference between different kinds of batteries. We will explain how nickel-iron batteries work, and how to make them last for decades. You will work on these projects with your own hands, so you will know how to do it yourself. We will have a weekend of homegrown, tasty food, and an engaging social environment. With each immersive, we feel like we get a little better at teaching. Our immersives have been really enjoyable and rewarding. We look forward to seeing you there!

Weekend Schedule, Sept 28 - 30

Friday Sept 28

4-6pm: Arrive and settle in.

6-7pm: Dinner, home-cooked and (largely) homegrown.

7-8pm: **Hopes and Fears about Wholistic Sustainability**

What do you think about your role building a more sustainable world? Will you get enough of what you need? What will other people think? Will your friends respect your choices? Are you proud, hopeful, or fearful about what needs to be done?

Saturday Sept 29

7-8am: breakfast

8am -noon: **Tour of Living Energy Farm**

Want to know what it takes to live without fossil fuel? Get a look, up close and personal, at the tools and technologies that make it possible. We will show you each of our buildings, and the renewable energy powered machines that make it all work. We will also look at our organic farm, gardens and orchards.

12 noon-2pm: Lunch and break.

2-5pm: **Workshop - How to Build a DC MicroGrid, Hands-On**

At LEF, we have pioneered the creation of a DC powered domestic economy that is unique, effective, and durable. Our integrated village economy uses high-voltage DC daylight drive motors. We have a unique lighting system using very durable nickel-iron batteries. We will show you the basics of electricity, and show you how to wire solar electric panels, both high voltage and low voltage systems.

We will show you how to put together battery banks, and explain the difference between different kinds of batteries. We will review electrical basics -- volts, amps, watts, and kumquats. We will show you how to wire solar panels and batteries to power pumps and other devices. We will go out to the shop, break up into small groups, and each group will be given a series of tasks to make devices run. You will figure which panels/ batteries to attach to which device, and do it yourself.

5-6pm: **Community Singalong**

Songs for the Long Now: Using community singing to build attunement, enthusiasm and mutuality. This singing circle is welcoming of all voices.

6-7pm: Dinner

7-9pm: Sharing Circle

Sunday Sept 30

7-8am: Breakfast

8-noon: **Pumps -- How to Move Air and Water**

Any self-sufficient village needs to be able to pump drinking water, irrigation water. Heating systems and solar hot water systems need to move air and water to heat living spaces and make hot water for bathing and cleaning. There are dozens of different kinds of pumps, and dozens of manufacturers. We teach you about the basics of pumps and blowers, how they work, and which ones are suited for which applications. We will take apart some pumps, and see how they work.

We will then shift gears a bit, and talk to each participant about the needs they have where they live.

We will do go through a design process with each participant, as time allows, to address the needs you have at home to convert to living without fossil fuel.

12 noon-2pm: Lunch and break

2-5pm: **Sunday afternoon: The Tools and Technologies of Living Without Fossil Fuel Continued**

We will pick up where we left off in the shop on Saturday afternoon hands-on workshop. We will give you more experience wiring solar panels, motors, batteries, and pumps, so you can go home and do it yourself!

6-7pm: Dinner

7-8pm: **Evaluation and Closing Circle, Bonfire and Party!**

Monday

7-8am: Breakfast and Goodbyes