

IRESN Insights

Integrated Resources Enabling Sustainability

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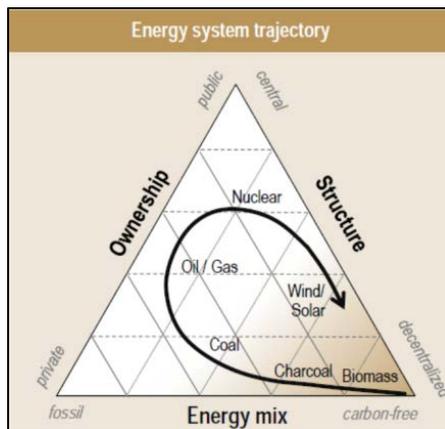
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Why feature an article about local projects? Well, IRESN is about integration. About decentralized energy. One aspect of integration is harmonizing diverse perspectives. Decentralized energy is about people, businesses, and communities being empowered to deal with energy in ways never before possible. They, along with energy industries, have diverse perspectives. They are no longer passive “ratepayers”, but rather are emerging as co-investors, co-owners, and collaborators. What they want will be ultimately decisive. They can be agents of an urgency regarding climate change that is increasingly self-evident but difficult to infuse into money-driven state and national political decision-making. New roles and relationships, properly and mutually understood, can add up to transformation responsive to climate change at the needed speed and scale.



[IRESN Themes](#)

New IRESN Insights format. Some new themes, including decentralized energy. Energy infrastructure is now on a decentralization trajectory. The basic business model for US electric utilities, whether investor owned, or publicly owned, has hardly changed at all in recent decades. Thoughtful electricity industry leaders understand that we are on the cusp of a major transformation in the design and operation of electric systems. The transformation is being driven by game changing technologies that are already unstoppable because they save money. Related IRESN themes include innovation and technology transfer, net positive electricity, decentralized energy finance, and local energy infrastructure integration. [Click here for more....](#)



[Net Positive Electricity: Insights from Home, Church and City Projects](#)

The path to carbon neutrality starts with people, their vehicles, and their homes, businesses, schools and churches. Individually, we have no moral standing to ask our governments to get behind changes we don't take the trouble to make for ourselves where we can. For example, carbon neutral buildings are generally also cost saving buildings. New buildings can be carbon neutral and save their owners money because low carbon features are easy to integrate in design

phases and then replicate in other new buildings. They are the so called low hanging fruit of carbon neutrality and attract the majority of policy attention.

Retrofitting existing buildings is more costly. Fixing what is not broken is typically not a priority, and replication opportunities are rare in the building renovation market. Important integrative decisions are required of building owners, not design professionals. Yet the carbon needle will move too slowly in response to policies that focus only on new buildings. Existing buildings are the higher hanging, much more abundant fruit. So, lessons from pilot retrofit projects that aim for carbon neutrality are valuable and instructive. I've been learning by doing. [Click here for some of the lessons...](#)



[Remembrance: Rainer Aringhoff](#)

Rainer's recent passing brought to mind his important contributions to renewable integration. His passion was concentrating solar power (CSP), and his role was pivotal. Now, more than ever, the quality of leadership Rainer demonstrated is needed everywhere and anywhere renewable energy faces political, economic and technical impediments and the need for integrative thinking and action. [Click here for a personal remembrance....](#)

2013 Review

In 2013, we revisited some Cal-IRES themes. Here are some links to past IRESN Insights resources, i.e. articles, presentations and reports:

Renewable Integration: [The IRES Network](#), [High Voltage Integration](#), [High Voltage Integration Policy Options](#), [What is Renewable Integration](#), [Off Shore Wind](#), [Renewables and Natural Gas \(article\)](#), [Renewables and Natural Gas \(ppt\)](#), [Economic Value of Concentrating Solar Power Thermal Energy Storage](#), [Ahead of the Clean Energy Curve in Palo Alto](#), [Pathways to 100% Renewable Energy](#)

Decentralized energy: [IRESN Focus and Mission](#), [LEAN Energy US](#), [Zero Net Energy Center](#),

Innovation and technology transfer: [Innovation and Technology Transfer: Speed and Scale \(ppt\)](#),

Energy Security: [OSCE Energy and Environment Conference \(report\)](#), [Report from Kyiv \(article\)](#)

Net positive electricity: [Local Solar Electricity – Who Gets the Free Ride](#), [Low Voltage Integration](#)

Decentralized energy finance: (report pending)

Local energy infrastructure integration: [Integrative Best Practices and Technologies for Local Power \(ppt\)](#)

Events:

[WADE 2013 Annual Conference Summary \(article by WADE's David Sweet\)](#)

[Verge San Francisco Conference Highlights \(report by Ronnie Holland\)](#)

New Blogs:

[Both, and](#)

[For and Against](#)