



How Regional Innovation  
Clusters Form: The Case of  
The Space Coast Energy  
Consortium

Ed Morrison

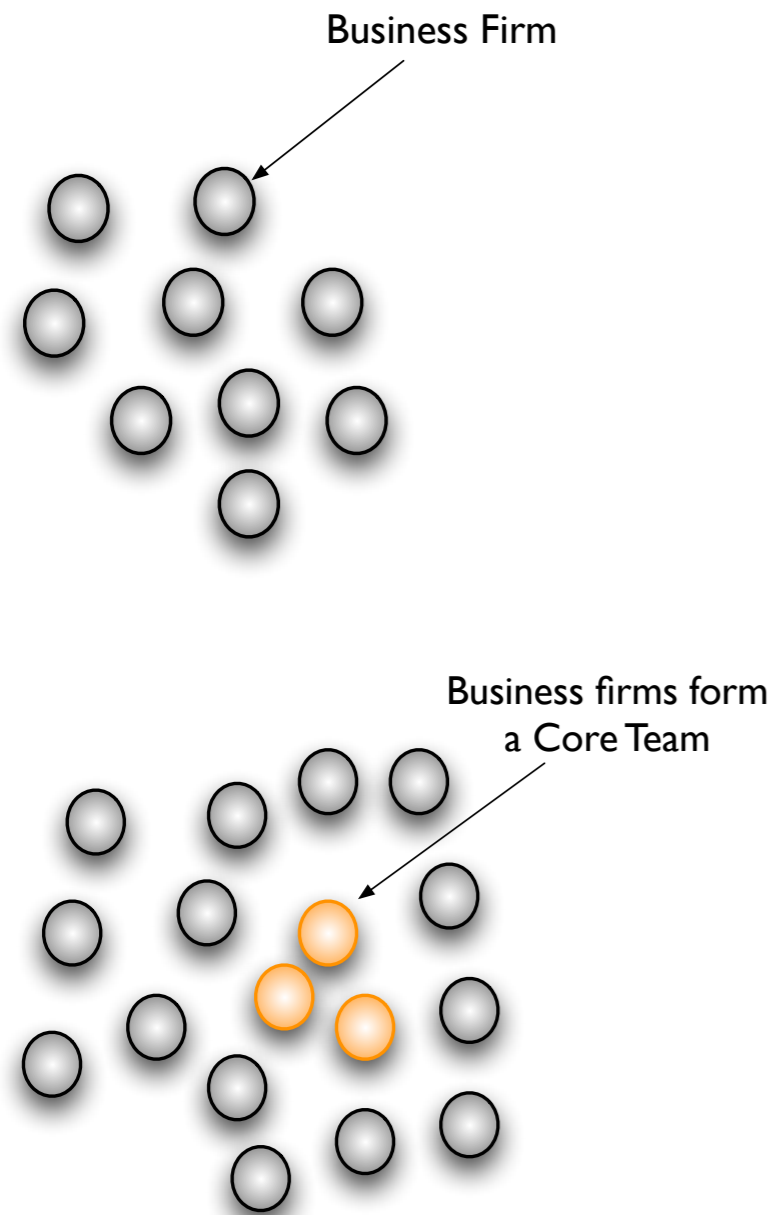
Purdue Center for Regional Development

February, 2011



Regional innovation clusters represent open innovation networks that transform regional economies by accelerating innovation. Clusters are defined by relationships, not memberships, and these relationships evolve as members of the clusters interact. Clusters form through identifiable stages. We can view these development stages from different perspectives.

One approach looks at the density and scope of the network of interactions within the cluster.

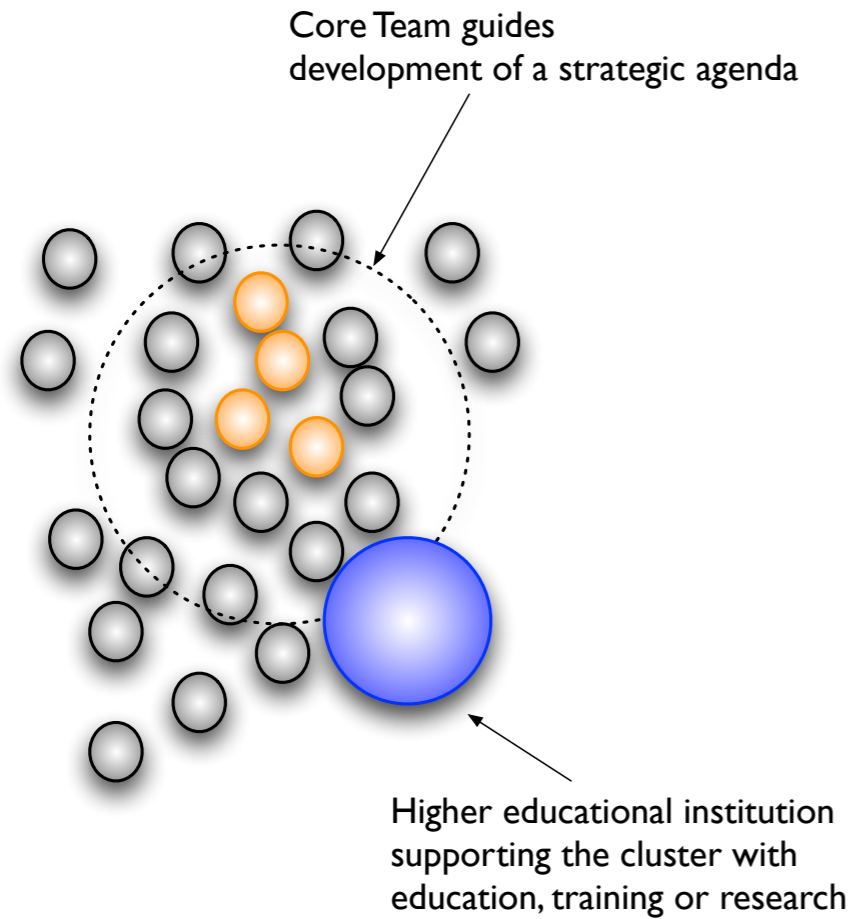


### **Conversation shifts.**

Clusters begin to form with conversations among companies that share a similar “competitive space”. These conversations typically focus on either 1) common problems, such as not having enough skilled labor; or 2) opportunities that could emerge by linking and leveraging assets.

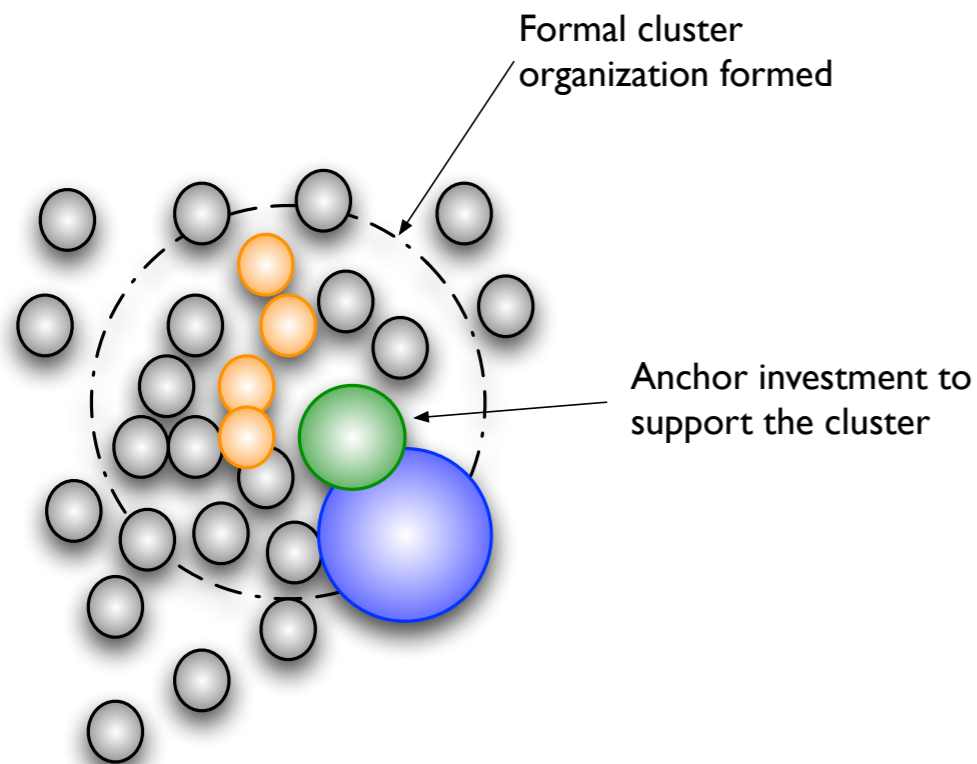
### **Network emerges. Core Team forms.**

As more companies join these conversations, the connections among these firms become stronger. Participants become aware of an emerging network within the region. A handful of firms emerge to form a Core Team that start to concentrate shared assets within the cluster. The Core Team can also include representatives from government, education and non-profits. However, successful clusters are privately-led, and publicly supported, not the other way around.



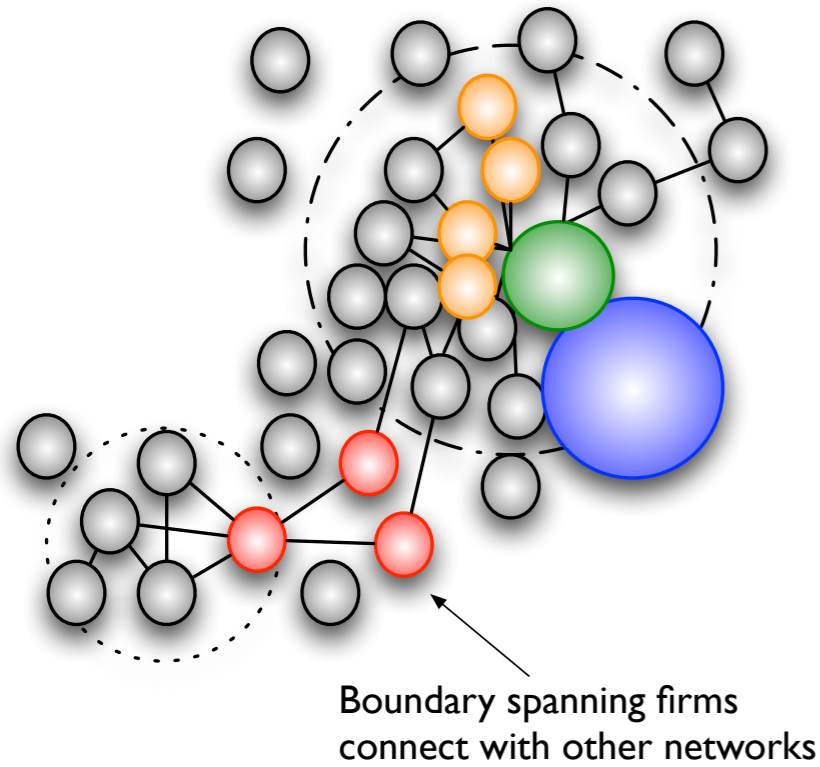
### **Strategic agenda emerges.**

Members of the emerging cluster begin to focus on a strategic agenda. They move the network strategically to focus on specific outcomes. The strategic discipline to guide an open, loosely joined network is called strategic doing. The cluster achieves greater alignment through "link and leverage" strategies generated with strategic doing. Higher education institutions become active in supporting the cluster with knowledge transfer: training, research, and so on.



### **Cluster organization forms. Anchor investments made.**

Members translate their strategic agenda into action: a portfolio of investments to strengthen competitive firms in the cluster. The portfolio includes larger scale shared "anchor investments". The portfolio ranges from investments in talent; entrepreneurship and innovation supports; marketing and branding; and physical facilities like incubators and research centers. The cluster formalizes its organization and governance.



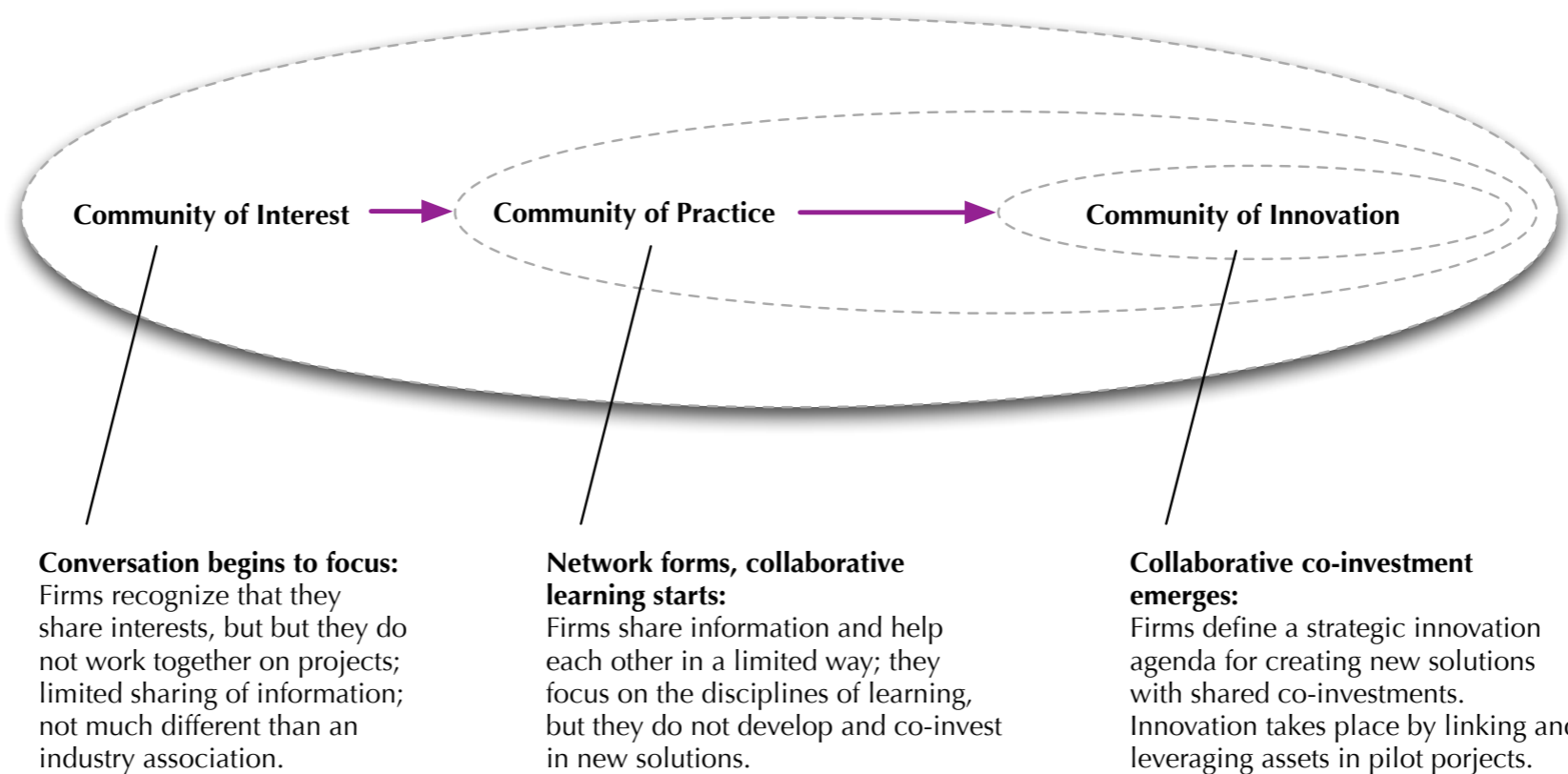
### Cluster continues to invest, adapt and expand.

Connections within the network become more dense and spontaneous. New anchor investments build out the infrastructure of the cluster. In addition, new clusters emerge and connect as "boundary spanning" firms connect with other firms and markets and opportunities.

This process is underway on the Space Coast of Florida with a clean energy cluster, the Space Coast Energy Consortium.

## Clusters share different characteristics as they move toward an innovation agenda

---

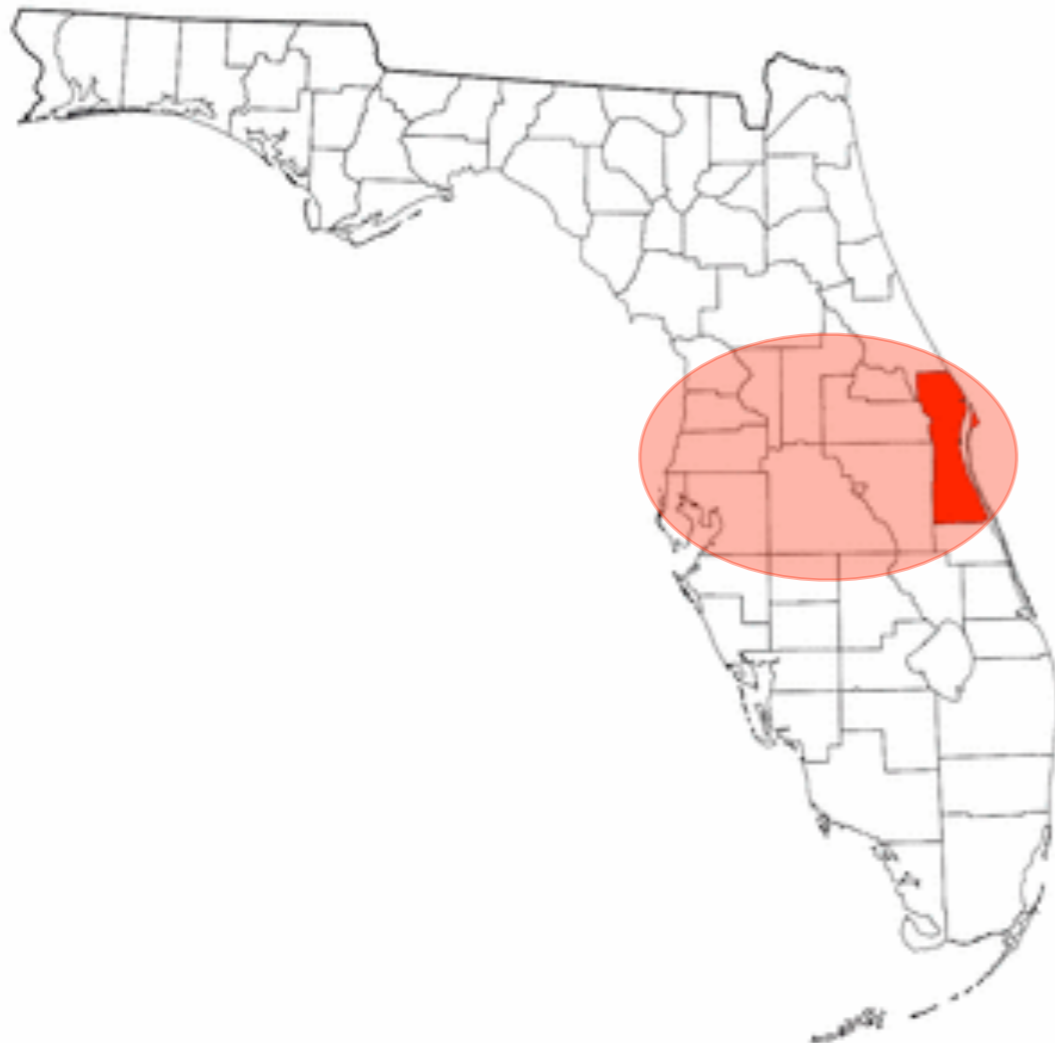


# Space Coast Energy Consortium

Driving Clean Energy Jobs and Industry in the Space Coast and Central Florida

## The story of the Space Coast Energy Consortium.

We can see this pattern in the emergence of a clean energy cluster in Florida. Within nine months, a cluster of clean energy companies has formed on the Space Coast. The cluster is part of a regional strategy to adjust to the shutdown of the NASA Shuttle. The cluster formed following a pattern of building the network out from a strong core.



The Space Coast Energy Consortium is a group of business and community leaders who are dedicated to driving energy-related economic development in the Space Coast and Central Florida. The Consortium grew out of the Space Coast Energy Symposium, an event that brought together leaders from throughout our community and the state of Florida to discuss ways to diversify our economic base and promote new and sustainable pathways for economic development following the end of NASA's Space Shuttle program.

### Our Mission:

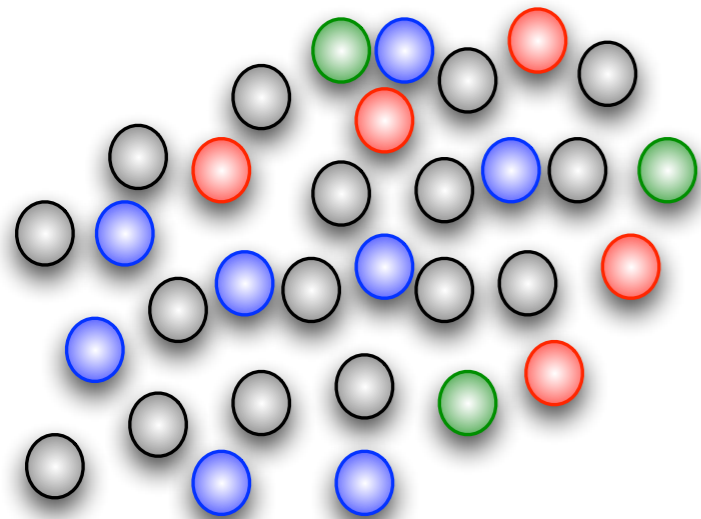
- Build a clean, high-growth and sustainable energy economy with global impact!
- Assist the transformation of the Space Coast region and Central Florida by redeploying assets to be competitive in today's global knowledge economy





### Short-term Action Plan:

- *Identification and Mapping* of Brevard and Central Florida's existing energy assets, stakeholders and competitive advantages
- *Educate* the stakeholders on the local, regional, federal and global "Energy Landscape"
- *Initiate* "business to business" opportunities to leverage existing interests and assets in energy-related businesses
- *Discover and Facilitate* space industry transition opportunities

### Consortium Goals:

- Develop and foster a new "innovation ecosystem" in the Space Coast and Central Florida region focused on energy-related products and services
- Establish a framework and focal point for the flow and connectivity of information for long-term economic development
- *Serve as a "convening point"* for discussion and collaboration among existing assets and programs across our region
- Identify opportunities for funding programs and provide information for businesses and institutions seeking such opportunities
- Accelerate opportunities to ameliorate job loss related to the Kennedy Space Center transition, and apply our space workforce's world-class skills to energy-related engineering challenges



-  Education
-  Government
-  Business
-  Non-profits



*The May 2010 Forum engaged about 200 people to identify new networks for the Space Coast by using the light weight discipline of Strategic Doing.*

## May 2010: Initial Strategic Doing Forum

The process of forming the Space Coast Energy Consortium began in May, 2011. A collaboration of organizations in Brevard County sponsored a Strategic Doing forum to begin the process of building new networks in the wake of the NASA Shuttle shutdown.

Strategic Doing, in contrast to Strategic Planning, enables people in loosely joined, open networks to think and act with purpose to meet challenges. This approach is a transformative experience for many who are used to working in a hierarchal fashion.

Incubated by the Purdue Center for Regional Development, Strategic Doing provides a simple set of rules to guide the complex conversations needed to design and implement regional innovations quickly.

The approach works with groups large and small. Strategic Doing workshops translate strategic thinking into action. Civic leaders learn that in open networks, sophisticated innovations emerge from following simple rules. Network members make continuous adjustments in their strategy as they learn “what works”.



**Groups develop 'strategic doing'**

**Program helps in future planning**

BY JOHN MCCARTHY • FLORIDA TODAY • May 16, 2010

The strategic doing is getting done.

At the end of April, about 250 space company executives, economic development officials, politicians and business leaders gathered in Viera to kick off a "strategic doing" program for Brevard County.

The goal: to develop concrete plans to work together on preparing the local economy to deal with the aftermath of the end of the space shuttle program.

Doing that will require a strategy that bubbles up from various networks within the community rather than one devised -- and imposed -- by hierarchical leaders, said Ed Morrison, an advisor at the Purdue Center for Regional Development, who was in town for the summit and is helping direct the process.

"We can't keep forcing old solutions to try to work," he said.

Morrison is in the process of creating specialized websites that will allow participants to continue working together online. Those pages are expected to be ready later this coming week. Meanwhile, Brevard Workforce, one of the sponsors of the process, is planning another gathering for the group early in July.

"I hope people have made some major steps on these actions, and I really think they will," Brevard Workforce President Lisa Rice said.

Morrison said that in the past, wealth was created by a handful of leaders who developed plans that were carried out by subordinates. Now, though, he told the participants at the April 30 forum, it is "networks" that drive economic advancement. "Our job is to find a pathway... by connecting our grandfater's assets to our grandchildren's opportunity."

At the meeting, participants split into various "network" groups to tackle such topics as identifying industry clusters and how to attract them to Brevard, and "talent support," which looks at offering services to help retain highly skilled workers after the shuttle program ends.

But the work didn't end with the five-hour meeting. In fact, it was just starting. By the end of this week, each network will have special web pages that will allow members to work collaboratively online, further refining their plans.

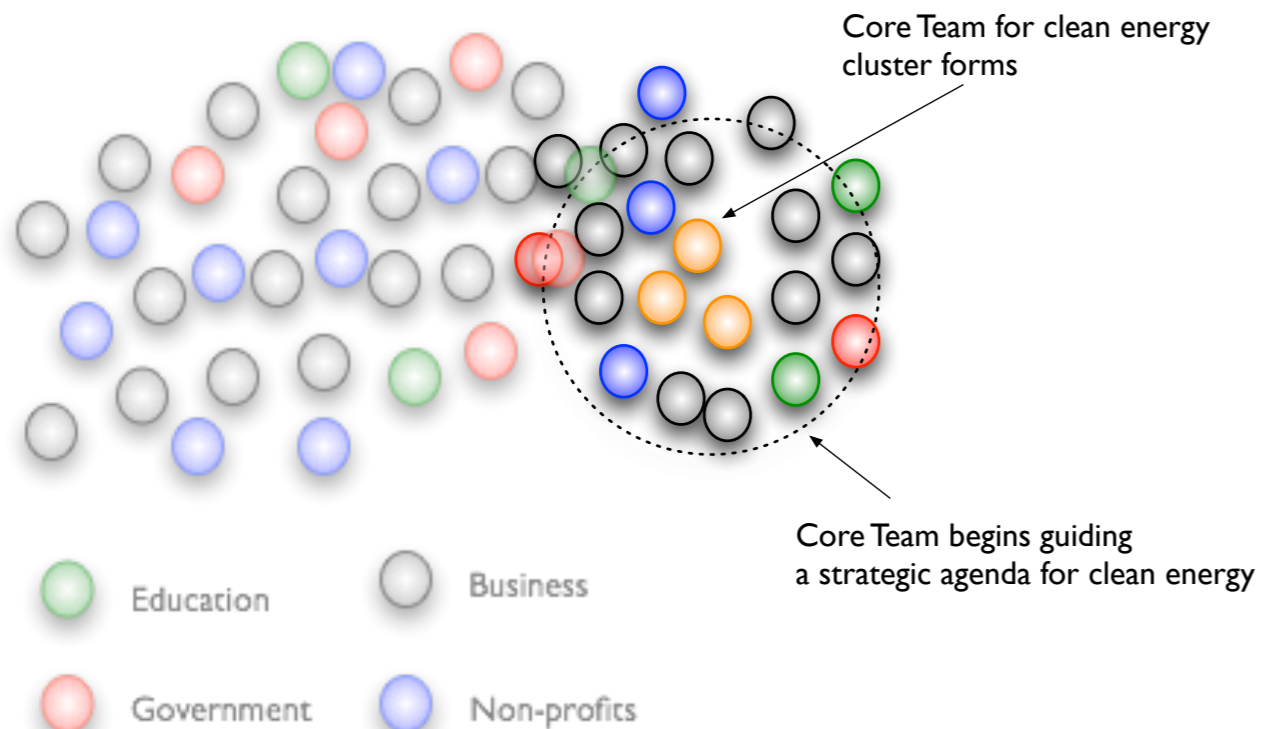
Some haven't waited for the websites to get to work.

"There have been some telephone calls between the parties at our table to at least lay the groundwork," said Dale Kercham, director of the University of Central Florida's Spaceport Research and Technology Institute at the Kennedy Space Center.

His group is working on developing a network to deliver a "new narrative" for Brevard that would develop a way to get the word out about where the county is heading rather than focusing solely on the end of the shuttle program.

What is somewhat different about the strategic doing process as opposed to traditional strategic planning is that the groups not only decide on a "strategic outcome," but they also develop steps that the groups can accomplish using their own talents and resources.

Clean energy network becomes more dense and connected



Larger group continues to develop new networks at a slower pace during the July workshop



## July 2010 Strategic Doing Workshop: Core Team forms; Plan for Consortium launched

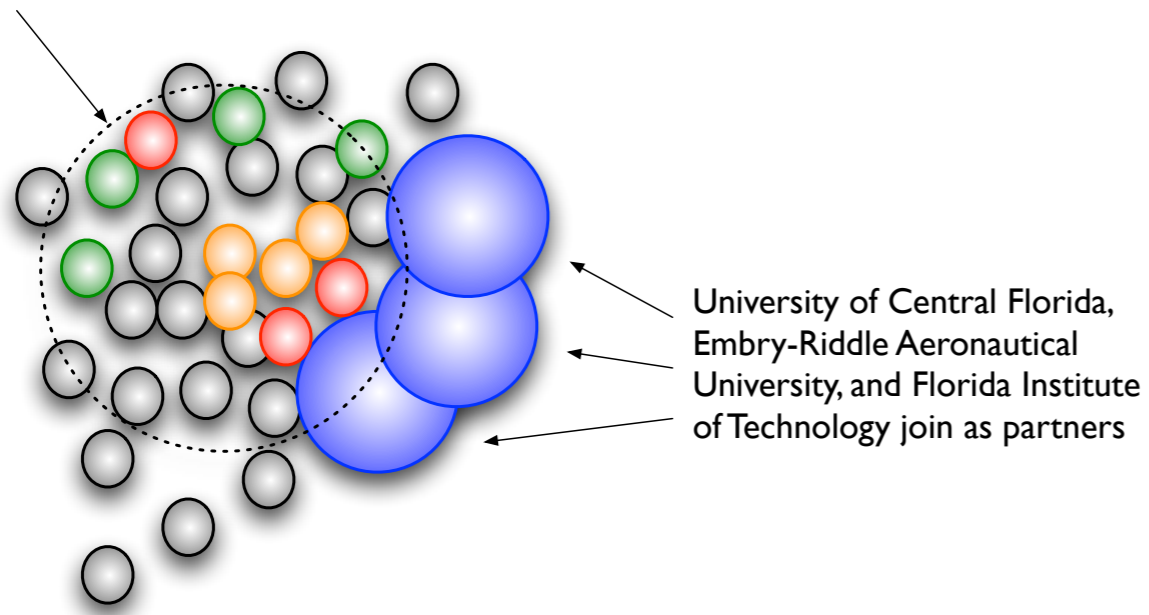
In a second Strategic Doing forum held in July, the emerging network of clean energy companies and interested organizations began forming around a Core Team. The group initially planned for a formal organization of the cluster in a broader symposium focused on clean energy opportunities.

During Strategic Doing workshops, participants engage in focused conversation on core strategic issues by following four intuitive questions. Timed workshop exercises teach the members how to conduct deep strategic conversations quickly.

As they complete these workshops, the members generate all the components they need for a strategic action plan. In subsequent workshops, the members revise their strategic action plan, much like a software program that is continuously improved.

The Strategic Doing discipline is simple, but not easy. It takes practice to master. Led by a Core Team, members of the clean energy network absorbed the lessons of Strategic Doing quickly and began designing on their strategic action plan.

Core Team begins guiding a strategic agenda for clean energy with Symposium



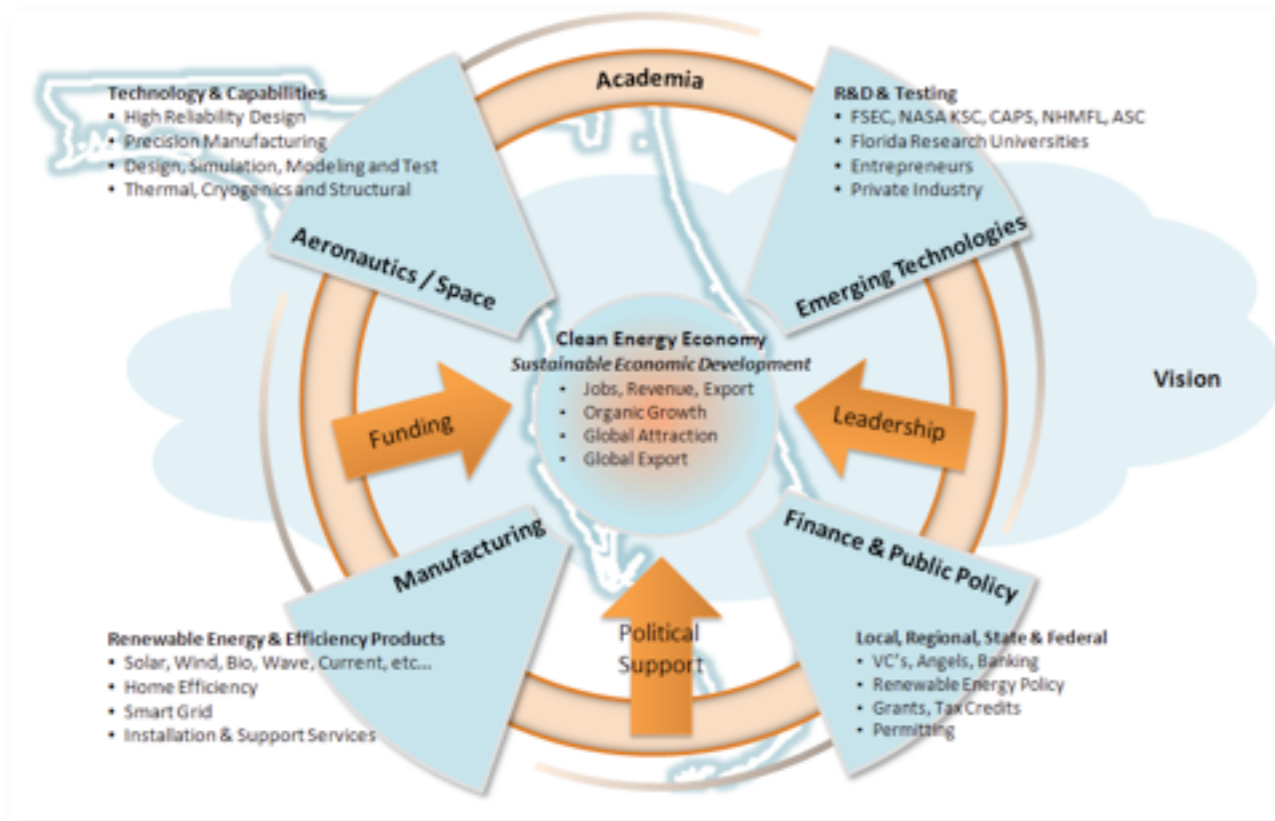
## September 2010 Strategic Doing Workshop: Symposium announced

In a third Strategic Doing forum held in September, the Core Team announced its progress on translating its strategic action plan. The Team announced the formation of a formal organization: the Space Coast Energy Consortium. In addition, the Core Team announced its first initiative, a clean energy symposium to continue uncovering and strengthening the clean energy assets in the region.

The Core Team also announced important partnerships with Embry-Riddle Aeronautical University, Florida Institute of Technology, and the University of Central Florida.

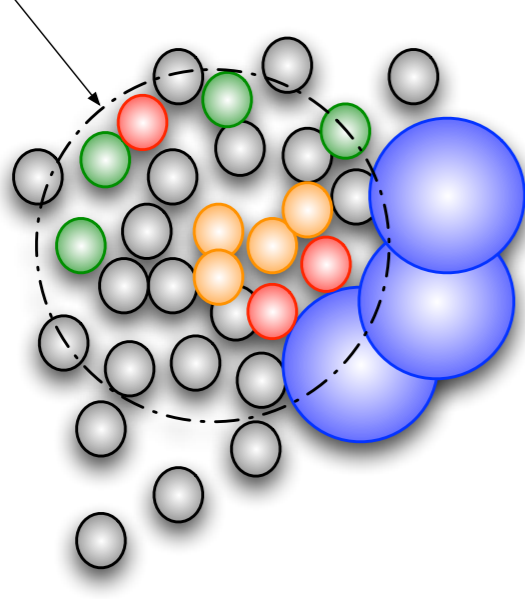
The Core Team organized the following Work Teams:

- ▶ Space-Energy
- ▶ Renewable Generation and Energy Efficiency
- ▶ Manufacturing
- ▶ Finance
- ▶ Policy
- ▶ Education and Workforce Training
- ▶ Market Development (regional, national and international)
- ▶ Administration and Governance



*The Consortium visualizes its strategy with a map of converging assets*

At Clean Energy Symposium, Core Team announces formation of Space Coast Clean Energy Consortium



## September 2010 Clean Energy Symposium; New organization formed

Clean Energy cluster forms a formal cluster organization: the Space Coast Energy Consortium. The Symposium further builds out the networks. Over 300 people attend. Symposium exhibitors include:

- ▶ Advanced Magnet Lab
- ▶ AeroIndustries
- ▶ AML Energy
- ▶ Brevard's GREEN Team\*
- ▶ BT Manufacturing
- ▶ Clean & Green Enterprises
- ▶ Clean Cities\*
- ▶ Embry-Riddle EcoCar\*
- ▶ FBNCCE
- ▶ Florida Institute of Technology
- ▶ Florida Solar Energy Center - UCF
- ▶ General Motors\*
- ▶ Green Light Industrial Airpark
- ▶ Hayworth, Chaney & Thomas
- ▶ Hills, Inc
- ▶ NASA KSC\*
- ▶ Space Florida
- ▶ Pratt & Whitney Rocketdyne
- ▶ Russell & Sun Solar
- ▶ Solar-Cool
- ▶ Structural Composites
- ▶ UMA Solar
- ▶ United Space Alliance

### Space Coast Energy Consortium

*Driving Clean Energy Jobs and Industry in the Space Coast and Central Florida*

**Thank you to our Symposium Attendees!**

*Stay Tuned for Future Programs and Events!*

**News**

- [CF News 13 story on the Space Coast Energy Symposium](#)
- [News Release: Brevard's Space Coast Energy Symposium: Out of This World](#)

**Symposium Presentations and Video**

[Symposium Video](#)

**Agenda**

8:30 a.m. – Registration & Coffee

9:00 a.m. – **Welcome:** John Porter, Partner, Distributed Energy Solutions & Mark Sentil, President, Advanced Magnet Lab

9:15 a.m. – **Keynote Speaker:** Dr. James M. Fenton, Director, Florida Solar Energy Center

10:00 a.m. – 11:00 a.m.

**Panel 1: Efficiency, Conservation & Distributed Energy**

*Energy is an integral part of our everyday lives, yet about 98 cents of every dollar spent on fuel in Florida goes out of state. Efficiency and conservation offer ways to cut costs and get more "power per penny" for the energy we rely upon every day, whether in our homes, businesses, or how we structure our communities. Smart grid technology, distributed generation such as solar hot water, and energy efficiency retrofits can help us provide jobs and opportunities in our community by investing some of our energy budget in resources here at home.*

[Home](#)

[Symposium Info](#)

[Feedback Survey](#)

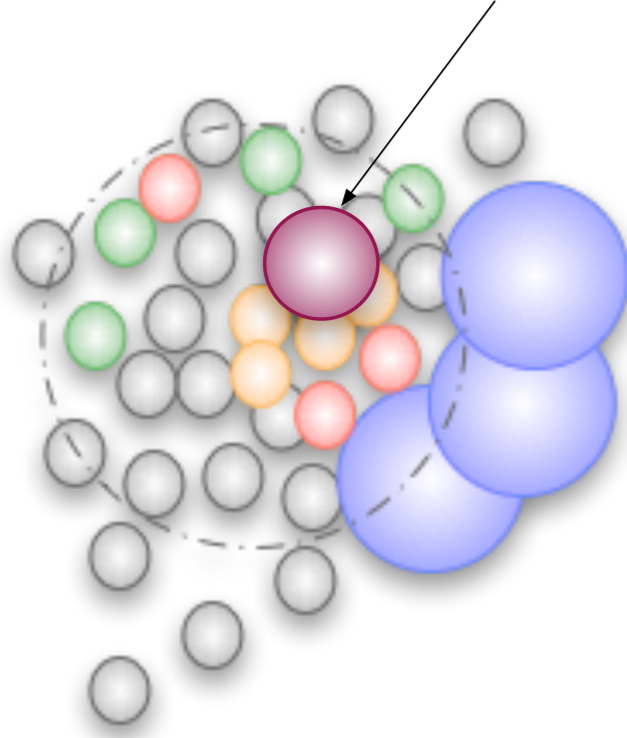
---

**Thank you to our Symposium Exhibitors**

Advanced Magnet Lab  
AeroIndustries  
AML Energy  
Brevard's GREEN Team\*  
BT Manufacturing  
Clean & Green Enterprises  
Clean Cities\*  
Embry-Riddle EcoCar\*  
FBNCCE  
Florida Institute of Technology  
Florida Solar Energy Center - UCF  
General Motors\*  
Green Light Industrial Airpark  
Hayworth, Chaney & Thomas  
Hills, Inc  
NASA KSC\*

\* Vehicles on display

Cluster makes anchor investments in facility and staff



### **November 2010: The cluster makes anchor investments**

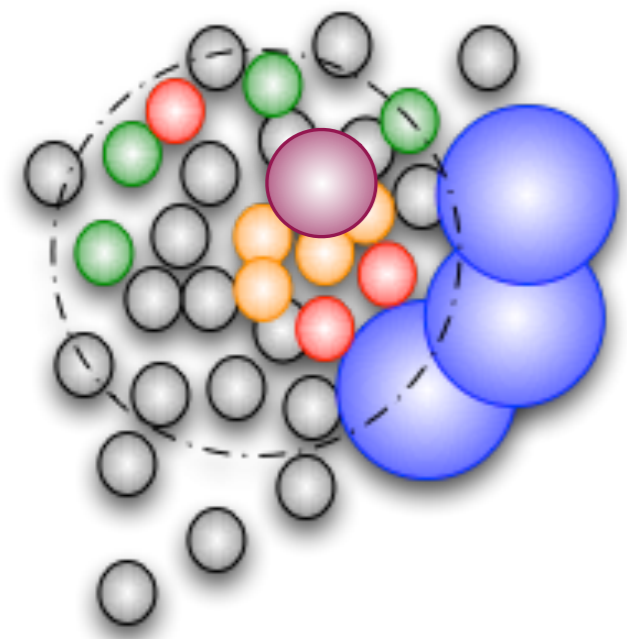
By November, the Consortium, working closely with its advisor, Linda Fowler of Regionerate, had recruited Mike Aller as its executive director, secured office space, and started working on a grant from the Gates Foundation in science, engineering and math education.

The cluster continues to map clean energy assets in the region, including: precision manufacturing, sophisticated energy services; advanced expertise in high reliability design, simulation and modeling; thermal, cryogenic and structural engineering; and a strong research and development infrastructure.

### **January 2011: Formal launch event**

At the cluster's formal launch event in December, over 100 participants continued work on the cluster's strategic action plan. Short term outcomes for the cluster include:

1. Continue developing a portfolio of pragmatic co-investment initiatives that deliver value to members of the cluster;
2. Strengthen the cluster's strategic discipline of turning ideas into action rapidly and develop a sustainable business model;
3. Continue expanding the cluster relationships in Brevard County Central Florida and nationally through value-added services and experiences.





The material is copyright, 2011, Ed Morrison and Strategy-Nets, LLC. Ed Morrison is Economic Policy Advisor to the Purdue Center for Regional Development and founding principal of Strategy-Nets, LLC, a for-profit company providing advice to entities wishing to enhance their efforts in regional economic development. Others are free to copy, distribute, transmit and adapt this material with the understanding that that you attribute the source as follows: "Source: Ed Morrison and Strategy-Nets, LLC."

**For more information on the Space Coast Energy Consortium**

For further information on the Space Coast Energy Consortium, visit the Consortium web site at: [www.spacecoastenergy.org](http://www.spacecoastenergy.org) or contact Mike Aller, Executive Director: [michael.aller@spacecoastenergy.org](mailto:michael.aller@spacecoastenergy.org); John Porter, founding board member: [johnp@porterworldtrade.com](mailto:johnp@porterworldtrade.com); or Linda Fowler, Regionerate, at [lindamariefowler@gmail.com](mailto:lindamariefowler@gmail.com).