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Appendix A & B
Introduction

Developing a Green Building Industry Cluster in Southern Vermont
The development of the Green Building Industry Cluster is an opportunity for Southern Vermont to create a national center for green building technology, research, product development and services that will result in sustainable economic growth and high value job creation to replace and exceed the high wage jobs being lost in the closure of Vermont Yankee.

ViTAL Economy, as part of its knowledge transfer and capacity building service, has provided BDCC with a step by step process to guide industry cluster leaders and participants in the effective development of industry cluster research and creation of a sustainable plan to implement and grow the green building industry cluster. This process is broken down into the following five measurable milestones.

**Milestone #0** – Organize Project Plan and Milestone Schedule from Oct 2015- Nov 2016
**Milestone #1** – Recruit & Develop cluster leaders and organize foundational research
**Milestone #2** – Conduct primary research, test cluster hypotheses, select niche markets
**Milestone #3** – Finalize niche market research & select 9-12 business case opportunities
**Milestone #4** – Quantify long-term opportunity value, implement and sustainable plan

ViTAL Economy explains each activity for these cluster milestones to cluster leaders in Milestone professional development sessions as well as in three industry cluster guides.

**Industry Cluster Guidebook (Sections I – VI)** – Explains how clusters develop, implement and sustain
**Cluster Roles and Responsibility Definitions (Section VII & Appendix B)** – Define who does what short & long term
**Industry Cluster Communications Plan (Section VIII & Appendix A)** – Recruit leaders and market cluster value

The most important perspective that is needed by cluster leaders is that the development of this green building industry cluster is not just a fourteen (14) month initiative. It is about creating a sustainable national center of green building technology, research, product development and services.

Cluster leaders are responsible for developing a viable high-energy economic growth engine for the regional economy over many years. This is about economic opportunity, economic transformation and job creation for all involved in the work of the cluster.

This is why entrepreneurial leadership from the private sector focused on innovation in collaboration with the non-profit and public sector is critical to the sustainable success of the green building industry cluster over the next 20 years.

Beginning on page 2, this overview describes industry cluster development work plans and deliverables by the industry cluster milestones listed above. It also references what section of the three industry cluster guides is most useful in managing the work of each milestone.
Milestone #0: October 2015
VE provides guidance to BDCC/SEVEDS for establishing green building cluster project coordination, logistics and communication plans. Cluster orientation conference calls with BDCC/SEVEDS and weekly project meeting calls for the consultant team will focus on identification and recruitment of cluster leaders and participants. VE will also recommend a research focus to develop all initial local, regional, national and global green building industry information to benchmark the breadth of opportunity for the Milestone #1 work plan.

Deliverables: Project Roles & Responsibility Guide, Project Plan & Communications Plan

Milestone #1: October, November and December 2015
Green Building Cluster is officially launched with a broad based leadership team. The leadership team will be oriented by VE in how successful industry clusters conduct, communicate and convert research into opportunity and action. The Milestone #1 public meeting in December 2015 will focus on defining the vision, goals, brand identify and guiding principles of the cluster. It will also validate and update industry cluster mapping of unique regional assets, identify and connect relevant green economy initiatives to the work of the cluster and define the cluster’s geographic and opportunity limits.

Deliverables: Cluster leadership training, asset inventory and maps, defined cluster vision, establish brand identity, adopt and initiate cluster research process, templates and tools

Milestone #2: January, February, March and April 2016
This is where cluster research is most intense and uncovers some of the most interesting insights and opportunities during the cluster development process. Cluster leaders will develop and refine up to six (6) hypotheses to be tested. They will collaborate with VE to conduct up to twenty-four industry leader interviews, oversee national and global industry research, select 4 niche markets for research and analysis and define the economic value of the cluster to the region. Cluster leaders will describe the green building and service value chain within the region and assess industry cluster gaps and barriers that need to be addressed to realize the opportunities the identified niche markets can bring to the region.

By this point in time, short-term business opportunities should begin to become apparent. Cluster leadership, supported by VE, should be able to support up to (4) business opportunity action teams championed by cluster participants. Cluster leaders will also indentify and then quantify talent development requirements to enable niche market growth opportunities to be realized over the next 5-10 years. Finally, cluster leaders will schedule a Research Milestone Workshop in early April 2016 to communicate the results of cluster primary and secondary research and confirm niche market direction for the cluster.

Deliverables: Research report on findings from primary and secondary research, final green building hypotheses tests, niche market and business opportunity recommendations and production of green building and services value chain focused on the region.
**Milestone #3: May, June and July 2016**
Cluster leaders working in collaboration with VE will test and adjust cluster-defined hypotheses from Milestone #2. They will refine and adjust niche markets as appropriate to maximize regional opportunity for economic growth based on leveraging the unique assets of the region. They will then identify 9-12 actionable business case opportunities within the four (4) defined niche markets. Cluster leaders will appoint cluster action teams to research these niche market business opportunities. They will also define the packaged systems approach to green building products and services as well as the focus for a national green building knowledge center of excellence.
Cluster leaders will also benchmark size and nature of the current state and proposed future state of the cluster as well as determine the level of regional competitiveness. Industry cluster policy and political trends will be defined. Cluster leaders will also agree on the finance ecosystem requirements for accelerating adoption of green building products and services through disruption of traditional mortgage and home equity solutions, appraisal standards and insurance requirements.

**Deliverables:** Champion the brand and build support. Final niche market and actionable business opportunities, defined finance ecosystem, system and packaging approaches from products and services, completed value chain analysis and definition, support for up to four (4) opportunity action teams. Hosting of Milestone 33 Workshop in July 2016

**Milestone #4: August, September, October and November 2016**
Cluster leaders in collaboration with VE will consolidate all research into a final report that connects the opportunity for the green building cluster to achievement of the measurable job development, economic growth and quality of place goals of the regional CEDS. This will include a detailed, sustainable implementation plan for the cluster, which will include actions required to address gaps and barriers as well as to realize quantifiable opportunities over the next 5-10 years. Most importantly, cluster leaders will recruit the future leadership for growing the cluster and realizing the economic opportunity defined.

**Deliverables:** Final industry cluster report, a Phase 2 implementation plan, recommendations for developing a national knowledge center, strategies for integrating the work of related initiatives and the relationship of external partners to the realization of the niche market and business opportunities defined in the plan. Cluster leaders working with SEVEDS and VE will integrated the work of the cluster into the CEDS goals, strategies and action plans and suggest modification and updating the CEDS. Finally, cluster leaders will recommend future strategies for collaborative funding and governance of the cluster and related initiatives. Continue to champion the brand and build regional support for the work of the cluster as well as recruit private sector leaders to lead achievement of the opportunities defined.
I. Fundamentals of ViTAL Economy Industry Cluster Analysis

It is important for cluster leaders to understand the priority role that industry clusters play in a region’s economic strategy. This chapter highlights the core ViTAL Economy principles and describes the difference between traditional and ViTAL Economy industry cluster development.

A traditional industry cluster definition is “a geographically proximate group of interconnected companies and associated institutions in a particular field, including product producers, service providers, suppliers, universities, and trade associations”. Clusters arise out of the linkages or externalities that span across industries in a particular location.

Traditional cluster analysis tells us what defines a cluster based on historical definitions of capacity, and then advises us if we have sufficient ingredients to successfully develop such a cluster. Most rural communities would never have in place a sufficient critical mass to meet the minimum requirements for success as stipulated by traditional cluster analysis.

ViTAL Economy defines an industry cluster by “establishing core value linkages both within and across industry sectors. These linkages creatively leverage the indigenous strengths of a region. Clusters are assessed and prioritized in a collaborative process which insures that the critical challenges and opportunities of a region are continually addressed”. We do not pre-determine what clusters exist before we have analyzed what makes a community unique. ViTAL Economy cluster analysis is biased towards opportunity and action. It defines in a tangible way what success should look like, how it should be achieved and how it should be measured. ViTAL Economy cluster analysis does not pre-judge a communities ability to successfully develop an industry cluster based only on comparative critical mass analysis.

The research approach to ViTAL Economy industry cluster analysis uses a business strategy focus based on economic and business attractiveness of a cluster. It develops a prioritization of viable business development opportunities based on experienced political, economic and business data collection and analysis. These business opportunities then form the basis for achieving the long-term goals of the economic strategy plan. Industry research is the foundation of a plan for managing sustainable economic growth and organizational change.

Success in developing a vibrant and sustainable industry cluster within a region requires an understanding of how a ViTAL Economy community thinks about economic strategy and what the role of industry clusters are within such a strategy.

**Core Fundamentals**

A ViTAL Economy community is a global town square, which enhances quality of life and provides local, regional, and, global access to the resources, and relationships that are needed to compete in a 21st century marketplace *anytime and anywhere*!
ViTAL Economy fundamentals seem so simple but they are difficult to achieve. They require strong commitment and the help of experienced facilitators who know how to combine them into a unique formula for the success of your ViTAL Economy initiative. Every economic transformation has brought with it fundamental changes in the way communities connect and manage resources.

Managing Change
ViTAL Economy community economic development initiatives are designed and launched to ignite change. Change in the way in which a regional economy is analyzed using disciplined asset based tools. Change in the way individuals and organizations work together and share resources. Change in the way in which a community sets goals and take action based upon effective analysis and an improved entrepreneurial climate.

ViTAL Economy uses this proven model and tool to introduce and implement change during industry cluster initiatives.
1. Establish a Sense of Urgency - builds the motivating force necessary to make the change worthwhile for each individual and the community as a whole
2. Form Powerful Guiding Coalitions - provides the necessary leadership to bring disparate groups together and foster collaboration across boundaries
3. Create a Vision - aligns leaders and participants to common goals and a compelling view of the future
4. Communicate the Vision - builds understanding & participation; the bigger the network, the more collaboration can occur, the more powerful the change
5. Empower Others to Act on the Vision - proves to the community-at-large that the decision-making hierarchy and concentrated power base of the past is changing
6. Plan for, Create & Communicate Short Term Wins - demonstrates that real change is occurring and helps those from Missouri (“show me”) to get on board
7. Consolidate Improvements & Produce More Change - builds momentum, making it easier for those on the sidelines to “take the risk” in joining the effort
8. Institutionalize New Approaches - provides the foundation for repeatability as more and more leaders and potential participants emerge

Building Collaboration
Collaboration, connectivity, and changed spending provide the action based framework that can guide a region through a positive economic transformation.

**Collaboration**
Sharing assets, talents, money and knowledge builds sufficient critical mass to compete globally, while informing emerging industry cluster strategies to assure regional growth

**COLLABORATION** is the essential behavior and management style of a ViTAL Economy. It replaces our desire to control information and resources for our own benefit with a determination to share information and resources for the benefit of all. Our values are no longer part of a secret strategy for our own success but beacons that illuminate a shared vision for a more vital economy. It is the recognition of our interdependence. It is the realization that our interdependence is not a weakness but one of our greatest strengths. Collaboration brings out the best of who we are as individuals, businesses, and communities. It is the essence of how we will lead and manage in a ViTAL Economy.

**People Collaborate**
Through Industry Cluster Teams.
**CONNECTIVITY** is the essential enabler of a ViTAL Economy. It is a connectivity that goes beyond infrastructure. It is a connectivity that does not rely on "field of dreams" thinking that "if we build it, they will come". It is strategic connectivity built on a collaborative process that envisions the tangible benefits of new applications and services that go beyond recreational use to fully support new ways to live, work, learn and govern. Connectivity is a mindset focused on connecting human and information resources in new and better ways for the economic benefit of the community.

**CHANGED SPENDING** is the fuel that funds a ViTAL Economy. It is built on the realization that funding drives behavior. In business, employees will concentrate on that for which they are compensated. The same is true for governments. How many of us have seen the promise of a new direction fall by the wayside because budgets did not correspond to policy rhetoric? In a ViTAL Economy, our spending priorities change. They are focused on a shared vision for a brighter future. They are also crafted to share the risk across a growing pool of stakeholders. Changed Spending is one way we measure success in building a ViTAL Economy.

**Understanding Your Regional Economy as a Swimming Pool**
The ViTAL Economy economic swimming pool analogy is a core fundamental understanding and evaluation tool used during industry cluster initiatives. Investment attraction or wealth creation is only achieved in two ways, export activities or retaining value in the consumer sector. New opportunities and strategies must recognize and pursue the addition of water (capital) into the pool (regional economy). Export activities may include new or expanded products or services sold to external markets. Strategies in the consumer sector may include the use, capture and reuse of resources, materials or waste resulting in the redirection of value from import to consumer, keeping water in the pool.
II. Defining a ViTAL Economy Industry Cluster Initiative

The traditional criteria for determining the existence of industry clusters had been through the analysis of Location Quotients (LQ). A region with a strong concentration of such industries can be presumed to have some basis for a regional comparative advantage. In this analysis location quotients compare the proportion of regional employment in a particular industry to the same proportion nationally. This provides a good starting point or first analysis filter, but should not be used to develop conclusions.

Data and experience has shown that rural regions tend to have few, if any, industry clusters when viewed strictly by location quotient analysis. VE therefore employs an asset mapping and value chain mapping process to identify existing and potential clusters in a region. The new approach combines data on several indicators of linkages, including co-location, skill use, and input-output relationships. In essence, an industry cluster exists when there is a geographic concentration of interconnected businesses, suppliers, service providers, and associated institutions in a particular field.

Industry clusters therefore are defined by relationships rather than a particular product or function and include organizations across multiple traditional industrial classifications. It should be kept in mind that every cluster is unique. Clusters come in a variety of purposes, shapes, and sizes and emerge out of a variety of initial conditions.

Connect Assets and Opportunities across Industry Clusters
A core function of industry cluster teams is to continually look for ways to connect resources to increase opportunity and create improved long term sustainable competitive advantages for a local community.

A regional cluster initiative will be most successful in the long term if cluster leaders and participants focus on the identification of such opportunities by reaching beyond their own cluster to connect with resources in another cluster. “Connecting the dots” of cluster resources is a critical component in a region’s ability to create, attract and sustain economic growth and generate new high value jobs.

<table>
<thead>
<tr>
<th>Traditional Industry Cluster Analysis</th>
<th>VE Asset Based Industry Cluster Opportunity Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant dependent, driven by external resources protective of IP and analysis processes, little interest in mobilizing the sector</td>
<td>DRIVERS Community &amp; sector driven, attractive to entrepreneurs focused on knowledge transfer</td>
</tr>
<tr>
<td>Strategies based upon aspirational goals, with no time frames or measurement of success</td>
<td>MEASURES Benchmarks the current economy, then establishes strategic measureable goals which are business case based</td>
</tr>
<tr>
<td>Relies on outside resources, short term solutions and fails to build capacity of local leaders</td>
<td>RESOURCES Identifies, leverages and sustains indigenous assets while growing local experts and their capacity</td>
</tr>
<tr>
<td>Highlights liabilities and gaps... limiting growth</td>
<td>GROWTH Leverages assets in the regions control, building strength and speed to growth</td>
</tr>
<tr>
<td>Broadly defined industry clusters producing academic, data-centered studies recognizing what exists today</td>
<td>MARKETS Local industry identified niche markets and opportunities empowering action teams</td>
</tr>
<tr>
<td>Little focus on financing needs and reasonable implementation plans</td>
<td>VALUE CHAIN Leverages and links remote assets to achieve value chain critical mass and feasibility</td>
</tr>
</tbody>
</table>

Leverages and links remote assets to achieve value chain critical mass and feasibility.
In a rural marketplace the sharing of resource capacities across clusters is critical to building sustainable economic advantage. No cluster can succeed by standing alone. New business opportunities and the recapture of import activities regularly are achieved by connecting existing assets and resources.

**Discovering Business Opportunities**

New business opportunities are uncovered through a disciplined and information driven process. The regions supply is determined by quantifying the regions capabilities and capacities. Demand is determined through external research linked to the preliminary industry cluster target. Through linkage and analysis of the Supply/Demand information, niche market opportunities should be recognized for further analysis and business development.

**Taking Action**

The disciplined process of acquiring and analyzing internal and external information regularly uncovers new business or product opportunities. In some cases local economic development professionals may use the new opportunities to craft and begin the pursuit of new strategies in the region. In many cases private sector leaders, who are deeply involved in the research and analysis, will take the information and execute actions to meet identified market opportunities. This is fine and should be celebrated! More importantly, this is an example of delivered value to private sector leaders who are actively involved in the Supply/Demand analysis.

**The Role of Action Plans**

Industry clusters focus on the development of specific targeted action plans to create new economic growth that will produce jobs in accordance with a specific strategy that is connected to a defined goal. Action plans evolve from the priority focus established by industry cluster mapping, research and industry input. Not all action plans are created equal, so ViTAL Economy utilizes a simple Action Plan Template to provide a guide for the formation and communication of action plans.

In many cases the completed initial action plan provides a solid basis for evaluation and selection of plans that justify additional development. Also, regularly it provides a tool to help an industry cluster team stay focused and not be distracted or derailed due to a self-interest project or plan.

**Cluster Team Work Plan**

Prior to launching an industry cluster team Local Economic Development Organization (LEDO) leaders and economic development professionals must have a defined work plan from team establishment to development of the implementation plan including expected outcomes and timelines. In
most cases, LEDO’s utilize a consultant resource to provide guidance, research and third party facilitation. The first step on the development roadmap is the identification and commitment of cluster team leadership, followed by a regional kickoff event.

The following outline on page 9 represents the SeVEDS Green Building and Services Industry Cluster work plan.

**Milestone #1 – Cluster Formation (Months 1 & 2)**
- Provide project coordination, logistics, communication plan to BDCC and SEON
- Establish broad-based core leadership team, 5-7 people
- Define the industry cluster, geographic boundary
- Recruit key cluster participants
- What will keep a participant at the table for 18 months?
- Define industry cluster team vision, goals and brand identity
- Validate and update industry cluster mapping and indigenous resources
- Establish initiative guiding principles
- Identification and analysis of relevant community and regional initiatives
- Design and facilitate the Formation Milestone Workshop
- Identify short term win opportunities and assign business opportunity action teams

**Milestone #2 – Asset Mapping & Research (Months 3-6)**
- Develop and agree on (6) initial hypotheses
- Conduct up to (24) industry interviews
- Conduct global and national industry research
- Identify (4) niche markets for research and analysis
- Determine economic value of the industry in the region
- Characterize the green building and service value chain in the region
- Identify and quantify the workforce development needs
- Conduct an industry cluster gap assessment
- Identify barriers to niche market opportunities
- Design and facilitate the Research Milestone Workshop
- Support up to (4) business opportunity action teams

**Milestone #3 – Targeted Opportunity Research (Months 7-9)**
- Testing and adjusting hypotheses
- Identify (9-12) actionable business case opportunities within (4) niche markets
- Benchmark the regional green building industry cluster
- Identify industry policy and political trends
- Determine regional competitiveness
- Define packaged systems approach to green building products & services
- Define finance, appraisal, insurance ecosystem for green building market
- Define focus of Green Building Center of Excellence
- Design and facilitate the Opportunity Milestone Workshop
- Support up to (4) business opportunity action teams

**Milestone #4 - Report & Institutionalize (Months 10-12)**
- Set long term performance metrics system for the industry cluster
- Connect cluster goals to CEDS goals
- Prepare and adopt a long-term sustainability plan for the cluster
- Develop a Phase 2 implementation plan for the industry cluster
- Make recommendations for a Green Building Center of Excellence
- Role of existing assets, programs (EDC Zone, etc.) and companies
- Identify and determine role for external partners, Yale, etc.
- Establish policy recommendations
- Delivery of Industry Cluster Guidebook and Sustainability Plan
- Measurement and progress assessment framework
- Public presentation of final report
- Pursue business and industry cluster action plans

**Deliverables:**
- Project roles and responsibility guide and work plan
- Communication plan
- Updated industry cluster asset inventory and map
- Industry cluster vision, goals and brand identity
- VE industry cluster tools and templates
- Milestone #1-#3 workshop presentations
- Summary results of (24) interviews
- Green building value chain
- Hypothesis briefs and conclusions
- (4) niche market recommendations, (9-12) business opportunities
III. Establishing a ViTAL Economy Industry Cluster Team

Regional Industry Cluster Development Initiatives focus on private sector business leaders, supported by economic development professionals using proven methods, fundamental business practices and comprehensive research to sustain involvement and to reach positive outcomes.

It is important for cluster team leaders and participants to understand how and why the region is implementing an industry cluster development initiative, as well as the justification for how industry clusters priorities were established within the region. There must be an opportunity case made and foundation of information including a compelling list of assets and capabilities, leadership commitment and attractive national or global trends to attract private sector participants.

Cluster team formation is a formally organized effort to promote industry cluster growth and competitiveness through collaborative activities among cluster team participants made up of industry sector, business, community, education leaders and other related and supporting functions.

Cluster Team Leadership Role

Leadership teams usually consist of 5-7 people representing the diverse components of the cluster. Industry cluster team leadership MUST be champions for the initiative and preferably have a history of positive influence and committee experience. Industry cluster team leaders are responsible for organizing the cluster; communicating the vision of the regional industry cluster, recruiting cluster participants, and assuring implementation of cluster actions. Cluster leaders are also responsible for maintaining the connection of cluster activities to the overall activities of the regional Community and Economic Development Strategy.

Role of Industry Leaders and Stakeholders

Upfront it is important to recognize that business owners, executives and other stakeholders are motivated by self interest, and that is OK. Their role is to provide key industry intelligence and knowledge that help set priorities and identification of topics that will support their success. Industry cluster teams begin with a reluctance and fear to share information. There is a belief that they are competitors rather than having a common interest in the strength and stability of the regional industry cluster. Through experienced facilitation and a complete work plan industry cluster participants begin to break down barriers by recognizing common goals and challenges.

To take a quote from “Good to Great” by Jim Collins, we must get the “right people on the bus”. In addition, the right people will play a variety of roles as leaders as shown in the graphic, adapted from “Good to Great”. 

![Diagram of Cluster Leadership Roles]

Source: “Good to Great”, Jim Collins
Managing Cluster Team Volunteers
Industry cluster teams are made up of volunteers not employees and should not be managed as if they were employees. They are volunteers making a sweat equity investment in the future economic well being of themselves, their family, their organization, and their community. Successful management of volunteers requires that cluster leaders and EDC staff understand the motivation of each volunteer and treat their volunteer commitment as an important asset deserving of a measurable return on investment.

One of the ways to document these motivations is to ask each cluster volunteer, what they want to see achieved as a result of their efforts for the cluster to warrant a priority commitment of 18 months of their volunteer time to the work of the cluster. Benchmarking and documenting these motivations will enable cluster participants to better understand each of their motivations and how each individual motivation is connected to achievement of the cluster vision.

Enthusiastic volunteers are subject to burnout and frustration. The way to minimize this occurrence is to make sure that each participant is focused on an action plan that has specific interest to him or her. When the action plan has been completed connect the accomplishment of the action plan back to the participants stated motivation for cluster involvement. Make sure that cluster participants are not overloaded with too many action plans.

Cluster volunteerism can be more easily maintained, if the cluster participant understands that they are learning new skills that are transferable to other parts of their personal or professional life. Providing leadership-training skills at each level of new involvement within the process for the cluster participant is a valuable incentive for continued participation.

The most important role of a cluster leader is to make sure the work is organized and documented and participants are rewarded and thanked for their participation. Some easy steps in organizing work are the following simple phrases, establish the cluster work plan, assign responsibility for work plan action plans, monitor and measure action plan progress, document and communicate results on a regularly scheduled basis, and reward participants for results. Always remember that sharing the credit will win far more support for the work of the cluster than only reserving credit for success to cluster leaders.

Role of Community Economic Development professionals
Local and regional economic development professionals play a critical role in the success of industry cluster initiatives. The following are the key roles and descriptions.

- **Economic Development Knowledge and Experience** – local professionals must apply and share their economic development knowledge, skills and experience. Building knowledge and capacity across the entire industry cluster team will provide long term benefits.
- **Facilitation** - local professionals must provide expert and appropriate facilitation to maintain focus and progress within the industry cluster team. This may occur during a regular meeting, to break loose a contentious topic, to facilitating group discussions and information analysis.

**Keys to Volunteer Participation**
1. Understand their motivation
2. Spread the workload
3. Ensure timeliness, meetings, responses, tasks
4. Good meeting management, agenda & objectives
5. Always value add to their participation
6. Recognize their time as valuable
7. Have fun and celebrate wins!
• **Task Support and Gap Filling** – local professionals must lead the follow-up on industry cluster team tasks, which may include meeting logistics, agenda formation and acquiring important information. Also, within a volunteer based effort there will always be resource gaps that must be filled to maintain progress, jump in and get it done!

**Managing Industry Cluster Teams**
Experience, and common sense wisdom, tells us that a region can’t tackle everything at once without the risk of overreaching. Therefore, as hard as it may be a region must prioritize industry clusters based on those which promise the greatest impact and ROI. We recommend that a region select and focus on two top priority initial industry clusters, with an additional two secondary or emerging clusters to be developed in subsequent years.

Practical experience has shown that it will take one (1) FTE of professional CED staff time to support and manage two industry clusters, in addition to outside consulting expertise. Facilitating two industry clusters in parallel has been found to be the most effective and efficient way to manage development and funding of industry cluster initiatives.

**Documenting and Communicating Cluster Team Results**
One of the most critical, but often missed steps, in the process of successfully managing change is documentation and communication of results and the connection of these results back to the process adopted. Industry cluster initiatives are all about change. Therefore, industry cluster teams need to be supported by an effective communications team. A communications and marketing committee is a critical component of regional CED success. This committee should include representatives of regional media firms and local volunteers who have an interest and a background in communications and public relations.

Results requiring communication include:
- Who is participating in the industry cluster process? Celebrating the connection of resources through the cluster process that leads to new relationships and shared opportunities is important in emphasizing why connectivity, collaboration and changed spending really make a difference.
- A connection that breaks down traditional turf behavior that has been a cultural reality and prohibited the sharing of resources in the past is a big win to communicate.
- Implementation of projects and receipt of financing and investment resources are important results to communicate.
- Documentation of benchmarks and assessment against benchmarks.

Everyone needs to know how he or she can fit in and how their interests can be addressed as part of a total strategy. Success breeds success, but only if others know about it.
IV. Indigenous Resource Asset Mapping

An asset is typically defined as “anything of value”. This is true, and in typical asset-based economic development programs these items of value are listed and categorized by industry relationships. In a Vital Economy industry cluster initiative assets are recognized as “indigenous resources” based upon the following definition.

**Indigenous:** having originated in and being produced, growing, living, or occurring naturally in a particular region or environment; plants, culture, people, etc.

**Resource:** a source of supply or support; a natural source of wealth or revenue; a natural feature or phenomenon that enhances the quality of human life; computable wealth; a source of information or expertise.

Indigenous resources are identified in nine specific categories which have both tangible and intangible characteristics. The indigenous resource asset mapping provides a strong foundation to define the industry clusters unique competitive advantages and identification of new business and market opportunities.

The ViTAL Economy asset mapping approach is uniquely different in that it applies “opportunity analysis”. *Opportunity* is found by identifying what is “truly” unique in the region blended with and entrepreneurial climate. *Analysis* is the extension of an inventory to include key questions regarding the assets’ current status, how an asset can be leveraged and what is the value of such leverage. This can also be defined as the first step in building a “business case.”
V. Mapping the Value Chain in Industry Cluster Analysis

Mapping of the *Producer to Consumer* value chain helps business leaders gain a deeper understanding about the orientation of local companies and production and their interrelationships. The mapping must recognize the key relationships and product flows within a regional sub-sector value chain, by mapping of the primary activities and businesses. The value chain mapping must clearly define the interrelated business activities constantly looking for gaps or how parts of the value chain can be brought back to the regional economy.

Value chain analysis employs TQM, Six Sigma and other principles similar to what private sector leaders use in their business.

Local ED professionals and industry experts play an important role in fully mapping and analyzing the value chain. ED professionals in most cases are tasked with gathering information that paints the complete value chain picture, internally and externally.

Through the Value Chain Mapping the region and participants will soon realize unexpected benefits, such as:

- Businesses working collaboratively to improve overall sector competitiveness
- Discovery of high value immediate business opportunities
- Expansion of knowledge of capacities and capabilities between large and small producers within a regional sub-sector
- Enhance primary producers access and contacts with local suppliers

**Value Chain Analysis**

Industry Cluster Value Chain Analysis is a disciplined process for identifying and quantifying each element of an industry cluster value chain including where it is occurring and who is benefiting from the value added service. VE uses a mapping process to uncover opportunities that shorten the distance between Producer and Consumer. This identifies value chain gaps, which become opportunities to add value chain elements that enable a region to deliver products and services directly to the consumer.
Example: Asian Carp Value Chain Analysis
The example used here is from an Asian Carp value chain analysis conducted as part of Focus Forward Central Illinois. In this case you will see how the opportunity analysis went further than the fish product itself and into sports fishing and tourism impacts as part of the value chain.

Linkages to other Industries
While mapping the value chain, it is important to be aware of and watch for linkages to other industries in the region (whether they are part of the targeted industry sector or not). Sometimes these linkages appear in basic productions inputs or new innovations. Sometimes they come from the waste stream in one industry which can benefit another sector.
VI. The Hypothesis Question & VE Research Process

Throughout the ViTAL Economy process questions are asked, issued raised and data collected and analyzed – but against what? If there is no discipline to the process the risk is high that the region will become mired in *paralysis by analysis*.

The VE disciplined process utilizes a scientific method of hypothesis testing. The VE hypothesis method is an iterative process by which a premise or thought is tested and refined and proven TRUE or FALSE. The questions to be tested first must have a direct relationship or purpose for addressing a regional economic issue… the why?

The formation of the hypothesis is critical and should be focused on solving the issue and recognizing the opportunity.

The primary benefit of starting with a focused and complete hypothesis is the better use of human and capital resources to identify real opportunities.

The development of a hypothesis question is a primary element of the VE Research Process designed to efficiently and effectively build industry clusters and new market opportunities.

VE Seven Step Research Process  *(Asset/Niche Market → Data → Information → Knowledge → Opportunity → Action)*

**Step 1 – Characterize** the primary issues of challenge or opportunity to be addressed?

**Step 2 – Agree on hypotheses** to be tested…no more than four, as well as research purpose.

**Step 3 – Data/Information** - Conduct and document research. Test against each hypotheses

**Step 4 – Knowledge** - Integrate and communicate findings, describe the business opportunity and challenges. List resource gaps.

**Step 5 – Identify and agree on next hypothesis to refine the opportunity**, if required

**Step 6 – Opportunity**- Provide a summary business case of the opportunity, from the research to direct action

**Step 7 – Action** – Recommend implementation plan with leadership and resources required.
Example: Aroostook County, Maine, Energy Industry Cluster Hypothesis Example

**Hypothesis 1:** There is sufficient wind energy potential to justify investments in wind energy generation.
- **Conclusion - Yes.** Wind energy potential is not at the highest level, but is sufficient for small wind and in some areas for commercial/community wind.

**Hypothesis 2:** Wind energy generation is a feasible and viable method of addressing the premise and proposition.
- **Conclusion - Conditional:** This question has not been completely answered at this time. Small wind is likely viable for some land owners. Current transmission grid barriers were determined to be a limiting factor for large scale commercial wind development at the present time.

**Hypothesis 3:** The electrical transmission grid into and out of northern Maine along with connections to the ISO New England have sufficient capacity to handle generation for export to Maine and ISO NE.
- **Conclusion - Failed.** There does not appear to be sufficient transmission capacity from Aroostook County to the rest of Maine and the ISO NE grid.
- **Conclusion - Failed.** The NE ISO grid is not robust enough to handle significant additional load generation; particularly the intermittent loads associated with large scale wind farms.

**Hypothesis 4:** There is a sufficient biomass resource supply to support a biomass-to-energy niche market.
- **Conclusion - YES.** There is sufficient forest residue to support a wood biomass energy sector.
- **Conclusion - YES.** There is underutilized capacity for direct purchase of biomass energy from the existing Boralex plants.
- **Conclusion - YES.** There is a sufficient supply of wood biomass to support the expansion of pellet fuel production.
VII. Cluster Roles and Responsibility Definitions

BDCC/SeVEDS has contracted with two consultant groups to support and guide the green building industry cluster initiative. ViTAL Economy will be leading a team of consultants including two local organizations and expertise, Building Green and Resilient Design Institute. SEON will also be contracted with BDCC/SeVEDS as local resources to provide initiative logistics, administration and communication plan management.

The project will be managed guided using ViTAL Economy industry cluster tools and processes. In Milestone #0 a strong and broadly industry represented leadership team will be established to provide strategic direction and champion the initiative. The leadership board with the consultant team will be integrating three elements together to drive new business opportunities and make a positive impact on the regional economy, Building Green Industry Cluster Initiative, SoVermont Business Accelerator and regional community initiative which compliment the effort.

Project Team Roles and Responsibilities

Vital Economy Alliance
Vital Economy (VE) will be the lead consultant to SeVEDS in the design and implementation of the Green Building Industry Cluster Opportunity Initiative. VE will work with and regularly communicate with SeVEDS staff to assure project coordination, communication and agreed upon adjustments. VE will provide the primary facilitation resources during industry cluster team meetings and community sessions.

VE will provide expert and experienced guidance to maintain focus on the work plan and objectives. As a third party resource, VE will guide the initiative and provide strategic analysis and development by connecting the regions industry assets to niche markets. VE will provide a variety of proven tools and processes to support the effective achievement of initiative objectives.
**Industry Cluster Team Coordinator – SEON**
The industry cluster team coordinator plays a very important role to make sure the team is organized and consistently making progress. The coordinator will work directly with the co-chairs to design meeting agendas, provide information packets and document meetings. The coordinator also is the primary communication monitor for the industry cluster team making sure that meeting minutes, research and all other information is distributed effectively. This position also plays the role as a gap filler and task completer if the industry cluster team volunteers are not able to meet deadlines.

**Research Lead - Building Green & Resilient Design Institute**
Building Green, Inc. is the locally based industry expert with global knowledge and insights on green building trends and markets. The company and staff will lead the primary research element of the industry cluster opportunity analysis. The research will be conducted in four primary categories: political, economic and business data collection, macro- and micro-economic analysis, business trend analysis, and regional capacity analysis. The research resource will prepare and deliver, in presentation format, its findings and key analysis to the industry cluster leadership team and at the larger community events.

**Community Economic Development Professionals**
Local economic development professionals participate as technical advisors for the industry cluster team initiative. Primarily this includes the determination and or clarification of economic development policies and programs in relationship to opportunities. Astute CED professionals will actively participate in the industry cluster initiative to strengthen relationships with industry leaders, become more knowledgeable on industry markets and trends and follow through on actions and opportunities that directly relate to their constituencies.

CED professionals provide support and coordinate regional resources as they regularly attend and participate in industry cluster team meetings. Highly functioning industry cluster teams are led by industry representatives and are not dominated or directed by CED professionals.
VIII. Communication Plan

Purpose
A communication plan is a significant project management tool for the launch, energizing and long term sustainability of a regional industry cluster initiatives. The operational purpose of the communication plan is to keep participants and local industry leaders up to date and in contact with the initiative, provide access to information and proactively broadcast progress and success of the initiative. The strategic purpose of the communication plan is to raise awareness of the initiative, generate focus and interest on uncovered opportunities and most importantly reinforce the vision, goals and objectives of the regional community economic development strategy.

Design Framework
The communication plan is designed with three primary areas of focus and targeted activities: Internal, Local and External. The implementation of the design is recommended to start with the Internal and Local elements of the plan, following with External communications as valuable content becomes available.

The Internal audience is the leadership and active participants in the initiative. This includes private businesses, economic development professionals, public sector representatives, non-profit leaders and interested residents. The objective of internal communications is to keep participants up to date and informed and creates a flow of important information.

The Local audience is the regional economy and broader community. The target audience is the residents and other community leaders that may not understand the industry and its role and benefit to the economy. The objective of local communications is to raise awareness for the residents and other community leaders about the goals, objectives and progress of the initiative. This may also include addressing or influencing identified challenge, beliefs or perceptions about the community or economy.

The External audience is regions and/or markets outside of the local area. This may include target areas that have assets or similar interests, knowledge leaders within the industry sector or industry associations or business organizations. The objective of the external communications component is to communicate directly to audiences that find the industry cluster work as an opportunity for investment or participation.

Sample activities and mechanisms for each communication design element

Internal
- Initiative image/brand
- Participant database, email, primary contact
- Document repository, Dropbox, Google docs, etc.
- Calendar of events
- Weekly NEWS updates, briefs, information,
- Initiative Engagement Platform, Facebook, LinkedIn, etc.
- Meeting notes/minutes
Local
- Initiative image/brand
- Initiative Engagement Platform, Facebook, LinkedIn, etc.
- Blog posting
- Newspapers, columns, press releases
- Radio shows or guests
- Group presentations
- Community events

External
- Initiative image/brand
- Initiative Engagement Platform, Facebook, LinkedIn, etc.
- Industry group discussions
- Blog posting
- Business periodicals and other printed documents
- Press releases
- Industry or regional events and conferences

To assist in the development of the Communication Plan we are providing a sequence of steps to craft and refine the plan, Appendix A
Appendix A

Communications Plan Development Outline
Source: Kellogg Foundation

Elements of a Communications Plan and Functioning Communications Committee
1. Work Function Responsibilities
2. Determine Goals
3. Identify and Profile Audience
4. Develop Messages
5. Select Communication Channels
6. Choose Activities and Materials
7. Establish Partnerships
8. Overall Implementation Plan
9. Evaluate and Make Mid-Course Corrections

Step 1:
Identify all the work functions/actions assigned to SEON in the Communication Plan.

<table>
<thead>
<tr>
<th>Function</th>
<th>Responsibility/Who?</th>
<th>Objective</th>
<th>Resources Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Engagement Platform</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image/Brand</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant Database</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Document Repository</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calendar</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weekly News</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blog, articles, columns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting Notes/Minutes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group Presentations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Press Release</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community events</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Step 2: Determine Goal

To initiate a successful and effective communications effort, start with an assessment of SeVEDS current organizational goals. Examine what SeVEDS organization stands for—its mission, values and beliefs. Look closely at who the SeVEDS organization is serving.

What are the primary objectives of the Green Building/Business Accelerator (GB/BA) Initiative?
1.
2.

What are the top issues facing the initiative right now?
1. Active participation by private sector business owners and leaders
2.

For each action and issue facing GB/BA:
(one page per action/issue) (further analysis in steps 3-7)

ACTIONS
- Community Engagement Platform
- Image/Brand
- Participant Database
- Document Repository
- Calendar
- Weekly NEWS
- Blog. Articles, columns
- Meeting notes/minutes
- Presentations
- Press Release
- Community events

ISSUES
- Active participation by private sector

*******************************************************************************************

Action/ Issue: ___________________________

Who is most affected by the action/issue stated above?
Who makes decisions about the action/issue?

What is the overall goal you want to achieve? (i.e., what change would you be able to observe?)

What tangible outcomes would you like to achieve through a communications effort?

How will you know you are achieving your goals? (Be specific. What would you see, hear, or have in-hand that would let you know you are making progress toward the goal?)

Who is the owner of this action/issue?

What is the due date for this action/issue?

What are the key milestones?

*******************************************************************************

**Step 3: Identify and Profile the Audiences for each action/issue**

Once you’ve identified the initial functions/actions and key GB/BA issues, it’s time to identify and profile specific audiences to target with a communications initiative.

The reason for taking the time to look this closely at your audiences is that this kind of background information is essential in choosing the most effective ways to communicate with the audience.

**Audience Definition Worksheet (one for each action and issue)**

*******************************************************************************

**Action/Issue: ______________________________**

Audience identification: whose knowledge, attitudes and behavior must first be changed in order to meet your goal?

List the individuals and/or groups who need to be your primary audience.

Who else is affected if you succeed in your goal? (secondary audience)
Are there others who can influence primary and secondary audiences?

Now you are ready to complete worksheets for each of your audiences identified above.

Audience Segmentation Worksheet (one per audience)

Audience: INTERNAL

Describe what you know about this audience’s knowledge, attitudes and behaviors as they relate to your issue:

What are the barriers to this audience fully supporting or participating in reaching your goal?

What are the benefits if they do?

What are the characteristics of this audience?

How do they spend their time?

What are their gender, ethnicity and income level?

How have they been educated?

What are the language considerations?

What or who are they influenced by?

What makes new information credible for them?

What or who could motivate change or action?
**Audience: LOCAL**

Describe what you know about this audience’s knowledge, attitudes and behaviors as they relate to your issue:

What are the barriers to this audience fully supporting or participating in reaching your goal?

What are the benefits if they do?

What are the characteristics of this audience?

How do they spend their time?

What is their gender, ethnicity and income level?

How have they been educated?

What are the language considerations?

What or who are they influenced by?

What makes new information credible for them?

What or who could motivate change or action?

********************************************************************************

**Audience: EXTERNAL**

Describe what you know about this audience’s knowledge, attitudes and behaviors as they relate to your issue:

What are the barriers to this audience fully supporting or participating in reaching your goal?

What are the benefits if they do?

What are the characteristics of this audience?

How do they spend their time?

What is their gender, ethnicity and income level?
How have they been educated?
What are the language considerations?
What or who are they influenced by?
What makes new information credible for them?
What or who could motivate change or action?

**************************************************************************************

**Step 4: Develop Messages**

Your messages are closely tied to your goal and objectives. They deliver important information about the action/issue and compel the targeted audience to think, feel, or act.

They can:
- Show the importance, urgency, or magnitude of the issue
- Show the relevance of the issue
- Put a “face” on the issue
- Be tied to specific audience values, beliefs, or interests of the audience
- Reflect an understanding of what would motivate the audience to think, feel, or act
- Be culturally relevant and sensitive
- Be Memorable

The messages you develop by using the worksheet provided in this section can be used in many ways. First, they are a set of statements that you and your team agree upon as conveying the key information for GB/BA. They will not include all the detail and supporting ideas and data that you may use in printed materials or other forms of communication. The messages you develop in the worksheets can become the underlying themes for your materials and activities.

Before turning to the Message Development Worksheet, take a few moments to read “Considerations for Message Construction.”
Considerations for Message Construction

Both the *channel* (the conduit for sending your message to the chosen target audience) and the *purpose* of communicating environmental information influence message design. Information may be designed to convey new facts, alter attitudes, change behavior, or encourage participation in decision-making.

Some of these purposes overlap; often they are progressive. That is, for persuasion to work, the public must first receive information, then understand it, believe it, agree with it, and then act upon it. Regardless of the purpose, messages must be developed with consideration of the desired outcome.

Factors that help determine public acceptance include:

**Clarity**—Messages must clearly convey information to assure the public’s understanding and to limit the changes for misunderstanding or inappropriate action. Clear messages contain as few technical/scientific/bureaucratic terms as possible, and eliminate information that the audience does not need in order to make necessary decisions (such as unnecessarily detailed explanations). Readability tests can help determine the reading level required to understand drafted material and help writers to be conscientious about the selection of words and phrases.

**Consistency**—In an ideal world there would be specific consensus on the meaning of new findings, and all messages on a particular topic would be consistent. Unfortunately, consistency is sometimes elusive. Experts tend to interpret new data differently, making consensus among government, industry, and public interest groups difficult.

**Main points**—The main points should be stressed, repeated, and never hidden within less strategically important information.

**Tone and appeal**—A message should be reassuring, alarming, challenging, or straightforward, depending upon the desired impact and the target audience. Messages should also be truthful, honest and as complete as possible.

**Credibility**—The spokesperson and source of the information should be believable and trustworthy.

**Public need**—For a message to break through the “information clutter” of society, messages should be based on what the target audience perceives as most important to them, what they want to know, and not what is most important or most interesting to the originating agency.

Prior to final production, messages should be pretested with the target audiences and channel “gatekeepers” to assure public understanding and other intended responses.

**Message Worksheet (one for each audience)**

**************************************************************************
**Audience: PARTICIPANT**

Action/Issue: _____________________

What are the barriers and benefits to your audience thinking, feeling, or acting on your issue?

What change in attitude (the way they feel about the issue) do you want to motivate in your audience to meet your goal?

What changes in the behavior (day-to-day actions) of your audience are trying to achieve?

Now, based on what you know about your audience needs to hear in order to think, feel or act, what are the three most compelling sentences you could use to motivate the audience?

1. 
2. 
3. 

*******************************************************************************************

**Audience: LOCAL**

Action/Issue: _____________________

What are the barriers and benefits to your audience thinking, feeling, or acting on your issue?

What change in attitude (the way they feel about the issue) do you want to motivate in your audience to meet your goal?

What changes in the behavior (day-to-day actions) of your audience are trying to achieve?

Now, based on what you know about your audience needs to hear in order to think, feel or act, what are the three most compelling sentences you could use to motivate the audience?

1. 
2. 
3. 

*******************************************************************************************
Audience: EXTERNAL

Action/Issue: _____________________

What are the barriers and benefits to your audience thinking, feeling, or acting on your issue?

What change in attitude (the way they feel about the issue) do you want to motivate in your audience to meet your goal?

What changes in the behavior (day-to-day actions) of your audience are trying to achieve?

Now, based on what you know about your audience needs to hear in order to think, feel or act, what are the three most compelling sentences you could use to motivate the audience?

1. 
2. 
3. 

*********************************************

Step 5: Select Communication Channels

Communications channels carry the messages to the target audiences. Channels take many forms and there is an infinite list of possibilities. Answering some key questions will aid you in identifying the most effective channels for reaching your audiences.

Sample Channels
- Television stations
- Radio stations
- Newspapers
- Web sites
- Community centers
- Street festivals
- City government offices (e.g. Division of Motor Vehicles)
- Malls
- Parks
- Schools, colleges, vocational and language training centers
- Libraries
- Recreation centers (e.g. basketball courts or soccer fields)
• Community non-profit offices
• Transportation depots/stations
• Supermarkets

Channel Worksheet (one worksheet for each audience)

*********************************************************************************************

Audience: ___________________________  Action/Issue: ________________

Where or from whom does this audience get its information? Who do they find credible?

Where does this audience spend most of its time? Where are they most likely to give you their attention?

Complete list of channels your team wants to use to reach this audience:

*********************************************************************************************

Step 6: Choose Activities and Materials

What are the activities, events, and/or materials—to be used in your selected channels—that will most effectively carry your message to the intended audiences? In choosing these, you should consider:

• Appropriateness to audience, goal, and message
• Relevance to desired outcomes
• Timing
• Costs/Resources
• Climate of community toward the issue/activity
• Cultural appropriateness (including language)
• Environment—geographic considerations

Sample Activities
• Social media
• Blogs
• News conferences
• Editorial board meetings at newspapers
• Radio talk or call-in shows
• A benefit race
Materials to Support Activities

- News releases
- Fliers and brochures
- Opinion editorials (op-eds)
- Letters to the editor
- Posters
- Public service announcements (PSAs)
- Video presentations
- Web pages
- Buttons, pins, and ribbons
- Promotional items and giveaways

Step 7: Establish Partnerships

Groups, organizations, or businesses may exist that would aid you in reaching your goal by providing funds, expertise, support, or other resources.

Please list allies or partners who support or work with your audiences or share in your goals.

1. SeVEDS
2. BDCC
3.

Step 8: Overall Implementation Plan

Use the following steps to determine time, budget and staffing needs:

1. List all actions and issues to be addressed
2. Under each; outline the steps, in order, that will lead to its completion (See milestones step2)
3. Assign a budget estimate to each
4. Assign a staffing needs estimate to each
5. Working backwards from the due date, assign a date for each Milestone step.
You can plot your dates on calendar pages if you’d like, or you can organize them in another timeline such as a Gantt chart (date/timeline runs horizontally across page; tasks are listed in chronological order down left-hand side. A line extends across the page from each task, showing the date work begins and ends on that task or subtask).

Step 9: Evaluate and Make Mid-Course Corrections

In each initial action or issue being addressed select a milestone as a point for assessing the need for any needed mid-course correction.

- Specify times to take stock of progress.
- Determine strengths and weaknesses.
- Identify obstacles.
- Create and implement new approaches for success
<table>
<thead>
<tr>
<th>Task Description</th>
<th>Milestone Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify and determine role of external partners, Yale, etc.</td>
<td>Oct-16</td>
</tr>
<tr>
<td>Provide input into value chain and workforce gap analysis</td>
<td>Feb-16</td>
</tr>
<tr>
<td>Facilitate the analysis and adjustment of hypothesis</td>
<td>Jan-16</td>
</tr>
<tr>
<td>Provide input into regional competitiveness analysis and conclusions</td>
<td>Apr-15</td>
</tr>
<tr>
<td>Define relationship between industry cluster and existing economic development assets</td>
<td>May-15</td>
</tr>
<tr>
<td>Define regional competitiveness framework and final conclusions</td>
<td>Jun-15</td>
</tr>
<tr>
<td>Conduct industry cluster value chain and workforce gap analysis</td>
<td>Aug-16</td>
</tr>
<tr>
<td>Facilitate research and development of finance, appraisal and insurance ecosystem framework</td>
<td>Jul-16</td>
</tr>
<tr>
<td>Facilitate validation and update of asset mapping</td>
<td>May-16</td>
</tr>
<tr>
<td>Support up to (4) business opportunity action teams</td>
<td>Mar-16</td>
</tr>
<tr>
<td>Design and facilitate Milestone #1 Workshop</td>
<td>Feb-16</td>
</tr>
<tr>
<td>Provide input into green building value chain</td>
<td>Aug-16</td>
</tr>
<tr>
<td>Provide a list of research priorities and provide economic data</td>
<td>Aug-15</td>
</tr>
<tr>
<td>Input and recommendations to niche markets</td>
<td>Mar-15</td>
</tr>
<tr>
<td>Provide primary policy and political trends</td>
<td>Apr-15</td>
</tr>
<tr>
<td>Assist VE, BG and RDI in scheduling interview sessions</td>
<td>Aug-16</td>
</tr>
<tr>
<td>Prepare Milestone presentation and participation</td>
<td>Jan-16</td>
</tr>
<tr>
<td>Prepare Milestone presentation and participation</td>
<td>Aug-16</td>
</tr>
<tr>
<td>Prepare Milestone presentation and participation</td>
<td>Dec-15</td>
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<tr>
<td>Prepare Milestone presentation and participation</td>
<td>Nov-15</td>
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<tr>
<td>Prepare Milestone presentation and participation</td>
<td>Oct-15</td>
</tr>
<tr>
<td>Define integration with SoVermont Accelerator</td>
<td>Oct-15</td>
</tr>
<tr>
<td>Participate in the development of the sustainability plan</td>
<td>Apr-16</td>
</tr>
<tr>
<td>Agenda development, presentation and facilitation</td>
<td>Mar-16</td>
</tr>
<tr>
<td>Support up to (4) business opportunity action teams</td>
<td>Feb-16</td>
</tr>
<tr>
<td>Design and facilitate Milestone #2 workshop</td>
<td>Jan-16</td>
</tr>
<tr>
<td>Facilitate the analysis and adjustment of hypothesis</td>
<td>Dec-15</td>
</tr>
<tr>
<td>Facilitate and provide barriers to niche market opportunities</td>
<td>Nov-15</td>
</tr>
<tr>
<td>Design and facilitate the Milestone #1 Workshop</td>
<td>Oct-15</td>
</tr>
<tr>
<td>Delivery of Industry Cluster Guidebook and Sustainability Plan</td>
<td>Sep-16</td>
</tr>
<tr>
<td>Participation and input into sessions</td>
<td>Aug-15</td>
</tr>
<tr>
<td>Provide input into Green Building/Services Research Report and Final Conclusions</td>
<td>Aug-15</td>
</tr>
</tbody>
</table>