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"Green" Policy and Regional Development

Editor's note: This is an op-ed piece by Rob Sentz, EMSI's marketing director and author of a series of five green jobs papers (http://www.economicmodeling.com/resources/whitepapers/).

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Introduction

Over the past year, EMSI has been fielding questions from local planners (workforce boards, community colleges, and economic developers) on how to look at green jobs, particularly at the regional level. To respond, we've been doing our best to link labor market information (LMI) to potential green sectors (e.g., renewable energy, energy efficiency, green construction, etc.) so people can gain an understanding of trends, earnings, education levels, and even things like skills associated with "green occupation clusters"[1] in their own economies. In doing so, we have made three general observations:

1. Many of these jobs are going to fall within the construction and manufacturing sectors (e.g., welders, roofers, HVAC installers, etc.),
2. Based on a lack of understanding, concrete information, and large scale demand, "green jobs" can be a very difficult development mission for local planners, and
3. It is vital to speak "from the data" as much as possible for the basic reason that if plans are being made on tenuous assumptions that cannot be supported, real people's lives, careers, and families could be harmed.

Our purpose in this piece is to examine these observations at a little more length—especially with regard to regional economic and workforce development. So let's start with a little frame of reference. In an earlier piece we mentioned that much of the thought behind green jobs has sprung from groups like the Center for American Progress, which have been integral in getting these policies pushed to the forefront. To illustrate, last year the Center's CEO, John Podesta, wrote (in reference to the recession),

> At the same time, we face a growing climate crisis that will require us to rapidly invest in new energy infrastructure, cleaner sources of power, and more efficient use of electricity and fuels in order to cut global warming pollution. There is much work to be done in building smart solutions at a scale and speed that is bold enough to meet this gathering challenge.
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> It is time for a new vision for the economic revitalization of the nation and a restoration of American leadership in the world. We must seize this precious

> opportunity to mobilize the country and the international community toward a brighter, more prosperous future. At the heart of this opportunity is clean energy, remaking the vast energy systems that power the nation and the world. We must fundamentally change the way we produce and consume energy and dramatically reduce our dependence on oil. The economic opportunities provided by such a transformation are vast, not to mention the national security benefits of reducing oil dependence and the pressing need to fight global warming. The time for action is now.[2]

This "requirement to invest" in cleaner energy to "cut global warming pollution" rests on an assumption that global warming represents an imminent threat—meaning that nothing should preempt a rapid, decisive response. The actual "investment" in clean energy and things like training are going to be made largely by the federal government via tax dollars collected from American businesses/taxpayers.

Now given the recession, job loss, and our nation's otherwise dismal financial condition, many are questioning the continued emphasis on things like green jobs, climate change, and cap-and-trade legislation. In recent months we have seen a sizable push back against some of this policy. For instance, certain industry sectors (e.g., agriculture) have voiced economic concerns about "going green." According to Green Inc., a *New York Times* blog on energy and environmental issues, the American Farm Bureau issued a memo that says:

> Climate change bills in both the Senate and the House will impact our farmers and ranchers, hit America's consumers and impair the economy of our nation. For farmers and ranchers, it will mean higher fuel and fertilizer costs, which puts us at a competitive disadvantage in international markets with other countries that do not have similar carbon emission restrictions. For the future prosperity of the U.S. economy and Ameri-

1 EMSI, "Analysis of Green O*NET-SOC Clusters," June 29, 2009. http://www.economicmodeling.com/resources/1495_analysis-of-green-onet-soc-clusters/.

2 http://www.americanprogress.org/issues/2008/09/green_recovery.html

> can agriculture, climate change legislation must be defeated by Congress.[3]

At its core, the memo indicates a growing concern that new cap-and-trade legislation would have significant adverse impacts on the agricultural economy and, as a direct result, on many rural communities, heavily dependent on agriculture for their livelihood.

In addition, some local workforce/education professionals in charge of industry-oriented training programs that support areas like manufacturing have their own set of concerns about green initiatives. Our example, which comes from *Inside Higher Ed*, makes the following statement:

> As the Obama administration talks up its "green jobs" initiatives, some leaders in workforce development are concerned that more traditional skill trades within the manufacturing and construction fields are being de-emphasized by community colleges looking for federal dollars to support newfangled programs.
>
> Among those worried are advocacy groups like the American Welding Society.
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> The American Welding Society gets concerned when we see Congress act, as it did this year, to discontinue funding for proven programs like the National Science Foundation's Advanced Technical Training programs in favor of brand new 'green jobs' education," said Ross Hancock, the group's spokesman, noting that the vote to discontinue has only passed the House so far. "That's because, right now, there is a shortage of skilled welders in this country, with welders retiring twice as fast as new ones enter the workforce. This trend is having a critical effect on our ability to compete in both 'green' and traditional industries.[4]

Our general observation here is that there is a certain level of tension between "national policies" and what can be thought of as "regional interests." This tension seems to arise from how a national policy initiative would or could impinge on the economic interests of a region. This sort of thing doesn't seem all that uncommon—regional development interests often find themselves at odds with national policy initiatives based on issues like economics, job creation, and local beliefs and values.

A third and final example that typifies the tension between green development and economic concerns comes from a Gallup poll, which indicates that the recession has dried up some of the support for increased environmental regulation. According to Gallup's Editor and Chief, Frank Newport,

> Right now, Americans are more concerned about the economy than the environment…The politician who says, "I'm going to cripple jobs and shut down factories" would be in trouble in this economy.[5]

The poll supports the notion that economic growth and environmental protection are not mutually exclusive. In recent decades, the United States, which is home to the world's foremost "capitalistic" thinkers, has certainly become a great champion of environmental issues. After all, the US is home to some of the most advanced environmental regulation (Clean Water Act, Clean Air Act, RCRA, Endangered Species Act, etc.), as well as countless national and community-based organizations that emphasize protection, stewardship, and conservation of the environment. Furthermore, huge, multi-national corporations (like GE, Apple, and IBM) never fail to mention something about how their company cares about the environment and makes "Product X" using only the most environmentally responsible practices/materials.

However, since the recession started, there has been a tangible push back against increased environmental regulation. Above all, this seems to be indicating that our ability to be environmentally conscious stems from our overall economic stability. Economics and environmental regulation need to find a way to exist harmoniously. If one makes the other unstable, they both will eventually become unsustainable. Destroying the environment will ultimately kill economic development. Over-regulation also will ultimately kill economic growth and development. If you have no economy at all, you will have no money to support environmental interests.

So we find ourselves at a crossroads between two competing points of view—one that thinks that we need to restore economic stability before we deal with environmental issues, and one that believes that if we don't address environmental concerns right now, we are forfeiting our future. With these things in mind, we want to delve into three areas which (at least in our minds) illustrate why local interests are sometimes at odds with green development.

Note:

If you have found that "green" has really helped your local development efforts, please let us know how and why. It would be a great encouragement to others who are feeling their way through this new and expanding area.

3 Galbraith, Kate, "Farm Bureau Aims to Kill Climate Bill," *New York Times—Green Inc*, October 14, 2009. http://greeninc.blogs.nytimes.com/2009/10/14/farm-bureau-targets-cap-and-trade/.

4 Moltz, David, "Is Job Training Zero Sum Game?" *Inside Higher Ed*, September 11, 2009. http://www.insidehighered.com/news/2009/09/11/trade.

5 Quoted in "Political Climate for Energy Policies Cools," by Jennifer Robinson, *Las Vegas Review-Journal*, August 09, 2009. http://www.lvrj.com/news/52828402.html

First Observation: Chasing Trends Versus Being Demand Driven

Imagine that for the past 20 years you have been laboring under the hood of your region's economy, working with local industries, educators, and othexr leaders to craft better strategies, develop the workforce, and encourage business in the region. Let's also say that a lot of the folks you have been working with represent companies and industries that have been around for a long time, and thus are extremely well established and represent large numbers of jobs and earnings for the region.

Now, if you remember, during the '90s there was this thing called the "dot-com bubble." Dot-coms grabbed a lot of attention all over the country and were generally accepted as being the next big thing. As a result, many regional developers tried to get into the game, and some failed miserably. When the bubble burst, many were left empty-handed and embarrassed that they had essentially just wasted a lot of the public's time, energy, and money on something that they frankly didn't understand or have any real reason (in a regional context) to be pursuing. In addition, local stakeholders (e.g., business leaders) most likely had a hint of "told-you-so" about the whole thing and were a bit irritated that their own business interests were overshadowed by some "Johnny-come-lately." The pain of that sort of lesson sticks and taught developers to be skeptical of trends that could lead the community down the wrong development path. In more recent times we have seen the mortgage bubble burst, and a lot of people are wary of any sort of fast trend full of great promises.

As a result, many are more willing to take a wait-and-see attitude before they start investing public resources toward something new. In some ways, this is where we are with green. So its not all that surprising that green is being met with skepticism by some local planners, who can and should be rigorously dedicated to spending their dollars wisely and only on things that will advance their region's businesses and people. This dedication seems to come from the fact that:

1. The mission statements of things like community colleges, workforce boards, and economic development organizations are essentially to be "demand-driven" and in touch with needs of the local community,[6]
2. When you live and work in a specific community, you actually begin to identify with its needs and interests. These needs and interests can and will run strong (think of the Rust Belt or communities that depend on agriculture), and
3. Much of the motivation for regional development can be traced back to the needs of local industry. The activities, interests, and employment of local industries directly and indirectly drive much of the employment and earnings in an area (the concept of an economic base).[7] This is where many colleges and workforce boards are focused.

Now, the basic problem with making something like a workforce board invest its resources into an emerging sector or a new policy, such as green, is that there simply isn't the demand, the number of jobs, or the background to justify the efforts. Workforce boards tend to focus on the thickest part of the pyramid, and as industries grow and start to offer more opportunities, workforce professionals can begin to focus and justify their efforts. This is why WIBs and community colleges typically focus on sectors like manufacturing and health care. There are many companies, a lot of demand, and tons of middle-skilled jobs to be had. In a recent blog post, we explored the top job openings by occupations[8] for three major metros. Across the board, we found that the greatest need was for computer specialists, nurses, accountants, software engineers, sales and marketing managers, and customer service reps—not exactly green jobs. These are areas that workforce professional will tend to focus.

Conclusion

Trends will come and go, and the challenge for the regional developer is to evaluate what makes the most sense for the region. Local planners should therefore understand what sectors "drive" the economy, and they should become familiar with how policies and spending plans might impact those industries. It is also important to determine how current development efforts can be augmented or supported by the green movement. If green policy is going to have a big impact on the economic drivers in the economy, then it's going to be important to be familiar with "how." Finally, familiarity with green policy will help local business leaders who might also be confused or concerned about the issue.

6 The Workforce Investment Act was actually written to make local development efforts "demand-driven."

7 Obviously, if the economy is geared more toward small businesses, this will be different, but for the most part, workforce agencies and community colleges need to focus on the largest part of the pyramid.

8 EMSI, "In-Demand Occupations in America's Biggest Cities," October 14, 2009. http://www.economicmodeling.com/resources/1979_in-demand-occupations-in-americas-biggest-cities/.

Second Observation: "Policy" Versus "Environment"

Right now, the primary struggles with green development seem to come from: (1) actually understanding what "green" is and (2) knowing which industries people need to be prepared for. In many ways, this might be because green is happening according to a top-down, policy driven approach rather than an industry driven one. In the U.S. we often see industry development happening from the ground up (e.g., from the local level and up to the national level). Industries develop hubs of production (e.g., Silicon Valley, the Research Triangle, and the Rust Belt) and regions tend to develop specialization based on being more competitive at producing and exporting something that is demanded by the larger economy. This in turn produces a need for a specific skill and knowledge set and so on. Green jobs don't really work this way. The "greening" of our economy has sprouted from a particular set of ideas (global warming, overpopulation, etc.); books have been written (Hot, Flat, and Crowded, Green Recovery, etc.); and policies have been shaped based on these ideas (carbon reduction, green jobs). Now money is being collected (via the ARRA) and pushed to regions in order to implement the ideas.

As is often the case, it is not particularly easy to translate the broad rhetoric, concepts, and policy (things like "clean tech") into local industries, impacts, skills, training programs, and demand. At the local level, it is also incredibly difficult to assess present "green" realities, let alone to project future trends of what jobs and industries will begin to thrive or fail. Those who try to use such national predictions to implement new regional training programs or develop local policies could find themselves in hot water should their programs not result in tangible benefits to the region. In a recession folks need and want jobs (in some cases, any job will do), and discussions bout how something like clean tech is going to be the next big thing can be really frustrating (think "dot-com" bubble).

Finally, a big part of the frustration around green jobs actually comes down to semantics. Let's try to unpack that a bit. Politicians and news anchors often refer to green jobs as some sort of new "industry." To a regional developer this is a little misleading because in regional development the term industry more correctly refers to a set of businesses that produce a specific set of goods and services. As a result, when we are talking about industries we are really much more concerned about "what" is being produced. Green development seems much more interested in "how" things are produced. It's a nuance that needs to be understood because it creates a lot of confusion. Here is a thought experiment: let's imagine you have two tire manufacturers. One produces tires using traditional "non-green" methods and the other uses recycled materials and can be classified as "green." At the end of the day are they both manufacturing tires? Well, yes of course. Should they be understood as being part of different industries? No. Both of these companies also likely employ the same sort of people, use the same sort of equipment, and have similar sales and supply chains. Also, from a training / workforce development perspective these industries are going to look pretty identical - with maybe a few minor skills differences. Seen from this angle, green is not actually about creating a new industry sector in either a general or specific sense. Rather, it's more about changing and retooling all existing industry sectors (check out this article[9] by Andrew Shapiro on CNN) to make them operate differently.

Conclusion

Regional economic strategies have to work in regional economic frameworks. And the timeframe for regional development (e.g. 30 weeks, 30 months, and sometimes 30) years) is much different than a politician's framework (e.g. 30 second soundbites, 30 minute stump speeches, and 4 year terms). Also, it should be understood that in regional workforce and economic development, the most difficult thing to do is to adapt the environment to the species. You could say, "Every region should have wetlands," and pump water into a desert to make wetlands, but how long can you sustain it and at what expense? Development needs to make sense in the context of a region and not the other way around. Ultimately, bending the rules of economics (like laws of ecology) can be done, but not for long.

As we have said before, it is imperative to gain an understanding of local industry activity and demand. If you know what your region's industries are doing and are up against, you can also be helpful in instructing practitioners on green policy and the skills needs they might have. Regions can do well with green developments, but it's going to come down to understanding how the current industry mix fits to the movement, harmonizing national policy with regional need, and operating within reasonable time frames.

9 Shapiro, Andrew. "Commentary: Make Every Job a Green Job," *CNN.com/Technology*, August 13, 2009. http://www.cnn.com/2009/TECH/08/13/shapiro.green.jobs/index.html.

Third Observation: It Needs to Be Data-Driven

In the United States, we have a huge amount of data at our disposal for development decisions. Our nation has over 1,800 (and counting) well-established industry codes (NAICS codes[10]) that are standardized for the entire country. The 20 big industry sectors[11] that compose our economy exist because of broad, long-lasting, nationwide demand. The data that are collected around these industries are highly useful for local and regional planning. Local developers can be expected to be both "demand-driven" and "data-driven" because these data are publicly available and because more and more technologies are being developed to help regional planners organize, integrate, and apply this information. This basically means that developers can focus in on what aspects of the economy create jobs, and they can do it in a very well-researched, objective manner (avoiding simply anecdotal reactions such as, "I think we should develop the entertainment industry"). The data help developers do things like determine which industries (or industry clusters) they should focus on, and it provides them with a very solid, well-defined structure on which to base important training, skills, and economic development decisions.

Currently, regional developers are just beginning to learn how to take advantage of this information to make the planning process more strategic and more objective. As a result, the US has an enormous competitive advantage over other nations that can only plan based on what they think might work. And when these data are harnessed and used to focus in on the most crucial sectors of a region, that is when communities, planners, and businesses can all be on the same page and see which direction makes the most sense in the context of the regional economy.

Our point here is that right now, local developers cannot take such a well-researched, data-driven approach to "green." There are a lot of people who are highly in favor of green, but in many ways, they don't bring the sort of objectivity that is needed or helpful when trying to hash things out for the sake of the local workforce. What if green actually isn't a good idea for a specific community? Something like Biotech is great if you can have it, but if it's not the right fit for the community, forcing it can be a bad thing.

Conclusion

*Getting data and conducting local analysis on green is not easy or even that feasible yet. EMSI has been doing some work with O*NET data that you can check out here.[12] This data should give you a good sense of what industries and occupations are going to be most closely associated with green development efforts. The biggest thing you can do is to be out in the community, talking to local businesses and meeting with investors who might be trying to establish green developments in your area. Their input and perspective are likely going to be the most effective way for the workforce and education systems to respond to the potential needs of a community.*

10 U.S. Census Bureau, "North American Industry Classification System," http://www.census.gov/eos/www/naics/.

11 Ag/Forestry/Fishing, Mining, Utilities, Construction, Manufacturing, Wholesale Trade, Retail Trade, Transportation/Warehousing, Information, Finance/Insurance, Real Estate, Management of Companies, Administrative and Waste Services, Health Care, Arts/Entertainment/Recreation, Accommodation/Food Services, Services, and Government.

12 EMSI, "Analysis of Green O*NET-SOC Clusters," June 29, 2009. http://www.economicmodeling.com/resources/1495_analysis-of-green-onet-soc-clusters/.

Final Remark

So here is the basic conclusion. For green to work at the local level, it needs to be demand-driven. It needs to be harmonized with local development efforts, and it must complement and not fight against regional economies. This means helping and not hurting local industries, not overburdening regions with too much regulation, and allowing regional developers to stay focused on longer-term efforts as opposed to short-term trends. Next, at the national level, green needs to mature before we can make massive efforts to supply it. There might be needs in various regions, but in many ways, green is still rolling up the on-ramp—trying to pick up speed.

Do we want green to succeed? Well, sure. Green in many ways is trying to become the new "Red, White, and Blue"—meaning it's more of a way-of-life issue that encapsulates living in a smarter, cleaner, more efficient way. Therefore, we all want these sorts of ideals to come to fruition. We want energy to be cheaper and cleaner, we want the environment to be better off, and we want our products and services to be more sustainable. However, as the polls show, we don't want these things at the expense of economic growth. All this is to say that people are going to be more supportive of the green movement insofar as it can hold itself to its own standard of sustainability—economic sustainability. The green movement and economic considerations are not mutually exclusive. If the economy continues to suffer, the green movement will suffer. If the economy recovers, there will be renewed interest in being "green." Before the economy took a nosedive, green was the direction that people wanted to take, and we imagine it will be again once the economy gets to its feet again.

If you have thoughts and things you would like to add, please feel free to contact us. We would love to hear from you. In addition, if you need help looking at what sectors drive your economy and how "green" developments might impact those sectors, please let us know.

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