LOOKING FORWARD

Wind energy represents a huge capital investment in Indiana communities. Wind farms bring geographically diverse and long-lasting benefits, including millions of dollars in property tax revenues and annual lease payments for Indiana's farmers and well-paying manufacturing and construction jobs. But wind energy is associated with skepticism, suspicion, and opposition. We provide a couple of suggestions that might help in the effort to support the development of wind farms.

I. Awareness of key assets and challenges in counties supporting or declining wind farms that are related to the wind energy

- The statistical analysis of studied counties revealed a set of characteristics that are common for the counties supporting the development of the wind energy industry (Benton, White, Randolph, and Madison counties). Those counties
 - o are more dependent on agriculture;
 - o suffer from decreasing population;
 - o have lower population density;
 - o are more consistent in terms of educational attainment levels (compared to the counties that are against the wind energy);
 - have a higher relative labor participation rate (compared to the counties that are against the wind energy);
 - have a higher relative inflow of earnings (compared to the counties that are against the wind energy);
 - o are net exporters of labor to neighboring counties.
 - The statistical analysis of studied counties uncovered a set of features that are common for the counties declining development of the wind energy industry (Tippecanoe, Clinton, Montgomery, Jay, and Tipton). Those counties
 - o are more manufacturing-oriented;
 - o two counties experienced an increase in population during 2010-2018;
 - o vary widely in educational attainment across each county.
 - Counties with wind energy benefit financially from the development of utility-scale farms. The industry pays local landowners primarily those who host turbines on their land but also others that are affected by its presence.

- In For Wind Counties the public receives positive messages about wind energy from local officials in Benton and White counties. That presumably explains why there are not partisan or ideological differences in support for wind energy. In Against Wind Counties, some of the local government members and community stakeholders oppose wind energy on the grounds of its cost or other characteristics. The attitudes toward wind power become more biased, which could cause support for wind power to decline.
- Wind energy expansion can be accepted differently. Some people can see the expansion as beneficial for county development and are positive. Others may express a lot of concerns and negativity.
- The new wind energy technologies are better and possibly can use the existing infrastructure in the counties that want to expand the wind energy sector.
- Road use agreements and decommissioning agreements are designed to offset other potential burdens the industry might place on the county.
- Wind energy has been changing the landscape that challenges many people.
- The constraint on the expansion can be due to a setback requirements, such as a small airport (because of radar at the airport, it is not allowed to build wind turbines in a certain radius around the airport) and different kinds of easements such as electrical transmission line, utility easements, and agricultural drainage easements.
- It is going to be harder to find areas for wind farm expansion that stay away from municipalities and large populations or areas with receptive communities.

II. Legislative instruments

There is a tension that exists between state and federal policies on the one hand, and, on the other hand, the policies of counties that have limited the growth of wind power investments.

While the federal and state policies encourage investments in the sector, the ultimate decision about whether to allow a given project rests with the county government where the project is to be located. This situation is the result of Indiana's granting of full siting and planning authority to local county governments.

A possible step to improve an effective legislative system to promote the implementation of wind energy is reclaiming siting and planning authority for large scale wind projects.

County governments that have allowed the development of utility-scale wind farms have benefitted financially from the decision. A number of documents and agreements secure benefits from the wind farms and offset potential burdens the industry might place on the county: Decommissioning Agreements, Road Agreements, Good Neighbor Agreement, Adjustments of the Good Neighbor Agreement, and Economic Development Agreement.

III. Technology development

Wind power is capital-intensive, and the purchase and installation of the turbines themselves represent a significant share of the total costs.

Utilization of the existing infrastructure – sections and towers - in the counties that want to expand the wind energy sector might decrease the total cost of generating wind-powered electricity.

Subsequent technological innovations, especially the development of taller turbines, have expanded the potential for other parts of Indiana to host utility-scale wind farms.

Also, it is important to identify appropriate public/private partnerships for the promotion of wind energy technology development and implementation.

IV. Awareness-raising capacity building and education

The following steps might help to raise public awareness of the benefits and opportunities of wind energy:

- Implement training and education programs with regard to wind energy.
- Awareness-raising and marketing campaigns aimed at all stakeholders.
- Development and dissemination of a "benefits case for wind energy."
- Improve communication and interaction between national, state, and county government institutions on wind energy policies.
- Receiving positive messages about wind energy from local officials and work closely with the community.

V. Fostering positive relationships between the commercial wind energy company and local communities

There are always individuals and groups within the local community who had benefited from the community fund and considered these benefits to be valuable. However, other community members can be suspicious of the developers from the earliest stages of the planning process.

Involving the public in planning and development process may help to reduce suspicions and skepticism, give members of the local community a sense of ownership over this aspect of the development, and can lead to positive outcomes.

County and community benefits provide an excellent illustration of how increasing participation in early decision-making processes may, in turn, increase local acceptance of wind farms.