There are many benefits to installing more renewable energy. Renewable energy costs are falling dramatically, it provides another reliable source of homegrown energy, has created jobs and invested billions across rural America, and is driving more competition in the energy markets.

Renewable energy projects like solar and wind are installed primarily in rural America. Farmers and ranchers have a long relationship making a living from their land, working alongside it to both maximize their yields and ensure its quality is preserved for future generations. As wind and solar have become a new cash crop for farmers, it's natural for farmers have a lot of questions about how renewable energy can benefit their farming operation.

Here are 5 ways renewable energy projects can benefit farmers:

1. **Stable Income**
   Farmers have long harvested crops on their farmland. Now farmers who participate in wind or solar projects are compensated for leasing their land to a renewable energy company. These fixed-term leases provide a stable, guaranteed income for farmers year-after-year - in wet and dry years, through unexpected frosts or hailstorm damages, through times of low commodity prices or lower yields.

   In 2015, farmers and ranchers received over $222 million in land lease payments. This added revenue has become a foundation that the farmer can use to grow his farming operation. It can
diversify income, provide cash flow in years of low corn prices (like the past 5 years), and can help finance new machinery, sheds, or other investments on the farm site.

"The wind towers have really been a boon for this area. It's given us another $20,000 income a year, and I just think they're fantastic. I wish the whole farm was covered with them," said Tim Hemphill, a farmer in Milford, Iowa.

2. **Access Roads Built to Benefit Your Farm**
   An access road is built to the base of the wind turbine for construction and maintenance of the turbine. Wind companies have years of experience working alongside farmers to try to construct the new road in a way that benefits the farmer and the wind company. These roads can often be built perpendicular to township roads, which keeps planting alongside it simple even for farmers who don't use autosteer. Farmers are free to use the access road to park grain trucks, tractors, combines and other equipment.

3. **Solar Farms Bring Pollinators, Which Boost Yields**
   When solar farms are being constructed, many companies have begun to plant native grasses and wildflowers beneath the panels to attract pollinators. This means that in addition to a land-lease payment for the solar field, farmers also benefit from an abundance of pollinators right next to their crops.

   A lab at Iowa State University (ISU) is finding that even a self-pollinating crop like soybeans can find big yield benefits from bees. Honey bee-pollinated soybeans have found yield increases of 10-40 percent compared to self-pollinated beans, and ISU expects that native bees may have an even larger effect. Projects like these are good for a farmer's income and good for the future of their land, preserving the health of the farmland and boosting yields.

4. **Improving Roads & Bridges**
   Wind farms provide new tax revenue for the county and township, which is often used to improve roads, bridges and reduce taxes for the community. Not only does this help the whole community, but it also helps farmers ensure they can continue operating heavy machinery on roads and bridges around their farm.

   The Franklin County Board in Iowa recently voted to lower property taxes after it paid off a bond used to fund $18 million in road and bridge improvements thanks to wind energy payments. Michael Nolte, a farmer on the Franklin County Board, stated, "[Wind] is our financial future. It's helping us survive and maintain services, whereas other counties have had to make cuts." The counties surrounding Franklin County had recently been closing bridges to heavy farm machinery after lacking the money to fix the bridges.

5. **Farmland Preservation**
   Wind energy has been called the "new corn" for struggling farmers, and now solar fields are increasingly allowing farmers to export a new product from their land in a long-term, sustainable way.

   In fact, lease payments from wind and solar can mean the difference between keeping a farm in the family or selling off the land or underinvesting in the operation during tough years. It allows farmers to continue their farming operation uninterrupted with the added benefit of dependable revenue.
Jason Wilson, a farmer in Calhan, CO, said, "The wind farm allowed us to be able to keep our family farm. We had come to a point where it no longer made financial sense to keep the property even with its vast sentimental value. The wind farm balanced the financial viability with the sentimental value, allowing the family farm to be passed on to the next generation."

Listen to Gary Baldosser, a fourth-generation farmer who raises corn, soybeans, and wheat. Gary testified before an Ohio panel to help state lawmakers understand how wind energy helps move farmers forward. Gary's town had a wind farm proposal but it could not be built because of Ohio's setback requirements. Listen to what a wind farm would mean for his family and the legacy he will leave his children:

[Open Video]

By providing a stable income for farmers, building new access roads, helping fund local road and bridge improvements, and boosting yields and pollinators, it's no wonder farmers and ranchers have turned to renewable energy. This new, dependable crop allows farmers to continue harvesting their land uninterrupted. As David Day, a rancher in North Dakota, puts it: "Everybody is getting excited about it now, because it isn't just a paycheck. For older people, now I have a retirement deal that I can look at, that I can go travel .... For the more middle-aged ranchers... it's a security net for us to look at ...[to] do the upgrades that we need on the ranch now and still secure our future for our children."