The Power of Entrepreneurs to Solve Environmental Problems

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ENVIRONPRENEURSHIP

Environmental problems often seem insurmountable and as recent news reports¹ highlight the impact humans have on the environment, the need for solutions for environmental problems to be discovered becomes more pressing. One popular market-based solution includes clearly defining property rights. Others advocate for governments to step in and legislate new environmental regulations. While these solutions have their merits in resolving certain issues, they are imperfect.

Clearly defining property rights would allow individuals to sue parties who pollute and litter on their property, incentivizing people to take care of their trash more responsibly. However, property rights cannot be assigned to non-excludable goods like air, making air pollution a problem property rights cannot solve. Similarly, government regulations can be effective at preventing individuals from imposing externalities -- external costs -- on somebody else, but legislation is ultimately limited by the policymaking process being influenced by special interest groups and bureaucrats who often concentrate benefits on themselves and disperse costs on others, making well-intentioned public policies ineffective and often counterproductive.

An often-overlooked solution to solve environmental problems is entrepreneurship² by people who are alert to the needs of the marketplace and work to fill those needs in innovative ways, resulting in mutually beneficial exchanges. Entrepreneurs work to find opportunities that result in win-win solutions: a win for consumers who have their needs met, and a win for producers who can capitalize on their innovation. “Enviropreneurs” find positive-sum solutions for hot-button environmental issues.³ By aligning individual self-interest with conservation, enviropreneurs can alleviate conflicts over solutions for environmental problems by negotiating voluntary, mutually beneficial agreements. Enviropreneurship, like entrepreneurship, is both an art and a science, so creativity is critical. The strategies that entrepreneurs use take different forms and do not necessarily fit clearly defined rules. There are two recent examples of enviropreneurship solving environmental problems: air pollution and bird migration.

EXAMPLES

Air Emissions

Even if property rights cannot be assigned to air, enviropreneurs can find ways to turn carbon emissions into a commodity rather than an externality. In Mona, Utah, two companies are working together to solve a problem in a positive-sum way. Rocky Mountain Power’s Current Creek Power Plant burns natural gas to create electricity, but as with all fossil fuels, the carbon emissions pose a problem that must be solved. Entrepreneurs at Houweling’s Tomatoes discovered an opportunity. They installed a 28-acre hydroponic greenhouse next to the Current Creek Power Plant. The wasted CO2 exhaust from the power plant is siphoned off and pumped into the greenhouse to provide fertilization for the tomato crops. Houweling’s can grow tomatoes larger and faster, while CO2 is captured and prevented from escaping into the air.4

Pop-Up Wetlands

Many of the wetlands in the United States have been drained or transformed into agricultural land, which has negatively impacted migratory bird species. Enviropreneurs at BirdReturns, financed by the Nature Conservancy, have developed an innovative project to direct water for migrating birds.5 6 Birdwatchers use an app called eBird, developed by the Cornell Lab of Ornithology.7 The app uses new technologies and crowd-sourcing to deduce where birds are migrating and where water is needed. The Nature Conservancy then uses private donations to pay farmers to use their irrigation to flood their fields, essentially creating “pop up” wetlands to facilitate migration and breeding. Bird enthusiasts get the outcomes they advocate for, and farmers are compensated for their assistance. Innovative solutions similar to this could be used to aid the conservation of species across the world.

CONCLUSION

These examples of enviropreneurs are evidence that emerging and innovative approaches to solving environmental problems exist. Assigning property rights or enacting public policies may fix some environmental problems, but the power of entrepreneurs to find innovative, positive-sum solutions to some of our most pressing environmental problems should not be underestimated.