

Assessing the Viability of *Arundo donax* as a Potential
Source of Green Energy for Electricity Cogeneration in Belize

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Wild cane (*Arundo donax*), found across the Caribbean, may well be a viable source of energy. In a region with electricity costs that are four times higher than most developed countries [1], any alternative to imported fossil fuels must be considered. Belize generates 37% of its current energy from hydroelectric and biomass producers [2], however, climate change poses substantial risks to these sources. The *Arundo donax* plant is a promising energy source for biomass, with the ability to thrive in a range of soil types and climatic conditions [3]. Smartt et al evaluate the feasibility of this alternate fuel, looking at yield and optimum growing conditions. The authors chose three sites with a natural proliferation of the wild cane, finding the best performance based on meteorological conditions and soil analysis.

The best site for the potential harvesting was determined to have the most accommodating soil type for adequate moisture and nutrient content. The selected site has the potential to produce sufficient wild cane to make the project economically viable.

What's Next

For the Caribbean, which has some of the highest energy prices in the world, alternate, local fuel sources are invaluable. The pioneering work of Smartt et al shows that wild cane is a viable contender as a renewable, resilient bioenergy crop. The continued research in this area is intended to enhance Belize's energy security while charting a course for alternate energy in the region.



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REFERENCES

