

Verdurous Solutions Private Limited 154, Preethi Layout, Bogadi Village, Mysore – 570026, India www.verdurous.in verdurousdrive@gmail.com "The responsibility laid on man as a rational being, to integrate himself, to relate the present to the past and the future, to live in time as well as in eternity, has become acute and urgent."



Dr. Sarvepalli Radhakrishnan (1888 – 1975) Philosopher and Statesman President of India (1962 – '67)

**The Verdurous team** has advised the **Royal Monetary Authority on climate** risks faced by the banking system and has developed guidelines for the financial intermediaries to implement processes to collect analyze and internalize data relating to climate risks impacting their operations

Under Assignment with the ADB and in coordination with the CAREC Institute, the Verdurous team has worked on region-wide optimization of electricity supplies through exploiting differences in time zones and on harmonization of sector-specific governance structures in the Central Asia region for future generations to enjoy uninterrupted services and cleaner energy Verdurous has developed models for social sustainability of RE projects to generate additional revenues and to enhance the viability of RE projects in competitive markets.

The Verdurous team has advised the Royal Monetary Authority on mobilizing green funds for domestic application and has provided guidance on the launch of a green-bond trading platform in Bhutan.

In the midst of the global pandemic and in the run-up to the national elections in the country in year 2021, Verdurous personnel undertook and completed the field surveys and consultations as a part of the independent evaluation of a cook stove and solar lighting program in Ethiopia and submitted an elaborately detailed report to the funding agency. *Verdurous* has worked towards optimizing the energy mix for Vietnam (years 2021 – 2030) to try and replace proposed coalfired thermal capacity with cleaner options to benefit the present and future generations The Palladium Group has contracted Verdurous to provide independent assessment, project screening, capacity building and related services for the Australian Government funded sustainable development initiatives in Vietnam, Fiji, Sri Lanka and Samoa. Under assignment with the Global Green Growth Institute (GGGI), the *Verdurous* team has provided policy inputs for the government of Indonesia to increase the proportion of cleaner energy in the country's generation mix through to year 2030.

Plataran Vintage

Verdurous personnel worked with the Global Green Grrwth Institute in Ethiopia to assess the feasibility of supplying Industrial Parks with Renewable Energy and to develop the policy and regulatory framework for the procurement of such supply.

The next generation in Nepal is excited about biogas digesters: *Verdurous* undertook the independent evaluation of the **USAID** – funded biogas-specific training of micro-finance institutions implemented by Winrock International / Nepal.

Generations of mountain Gorilla in Rwanda relax in the knowledge that their habitat is well preserved: *Verdurous* worked with the Rwandan Ministry of Natural Resources and UNDP - Rwanda to incorporate environmental considerations into macro-economic planning, across sectors.

Between years 2014 and 2020 Verdurous worked closely with UNDP – Vietnam to help the **Ministry of Industry and Trade** develop Vietnam's fossil fuel free fiscal policy that would balance between the present and the future, and reduce the country's dependence on coal: through detailed analyses of tariff regimes for RE deployment and specific contribution to solar PV and solar thermal promotion policy. **Prospective investors from** across countries were interviewed to understand barriers faced and recommendations were made to the government of Vietnam.

Traders benefit from solar-powered lamps in rural Bangladesh: under assignment with the Asian Development Bank (ADB), *Verdurous* worked on identifying environmentally sustainable alternatives to natural gas, and on promoting hybrid-energy systems in the country. Under assignment with the Asian Development Bank (ADB) and in partnership with Gauhati University, *Verdurous* undertook field research and conducted an independent socioeconomic assessment of the benefits delivered by investments made into rural roads under the Prime Minister's Rural Roads Program (PMGSY) in Assam. Verdurous helped Greenpeace India identify environmentally-sustainable alternatives to restarting the mothballed (Enron) Dabhol thermal power plant in coastal Maharashtra. Verdurous served as regional partner – South Asia to source investment projects, conduct due diligence and assemble teams of implementing partners for private equity funds: Emerging Asia Clean Energy Fund (Swiss / Dutch) and Focal Energy and Environment (Israeli / American).

Verdurous has developed a best practices guide "Knowledge Product" on small-wind, solar – PV, battery and diesel generator hybrid systems basing on experiences with pilot installations in the Maldives, Sri Lanka, Bangladesh, Nepal and Pakistan under an Asian Development Bank (ADB) Research and Development Technical Assistance grant.

The Washington, DC headquartered World Resources Institute **(WRI)** is a reputed 'think tank' and a 'do tank' seeking to contribute to global development based on rigorous research. *Verdurous* was associated with the Science & Research Team contributing to building capacity and strengthening the quality of research undertaken by the WRI in India and other countries.

IO G STREET

In the Philippines, the European Union has been supporting the Department of Energy towards achieving 100% electrification through implementing the SE4ALL initiative. *Verdurous* was involved with assessing concepts and appraising projects for eventual funding by the EU.

Austria, Vienna based Renewable Energy and Energy Efficiency Partnership (REEEP) had contracted Verdurous to undertake an independent evaluation of the investment portfolio and to carry out a Meta analysis to help shape investment strategies for the future. Verdurous has constructed a unique green stock-market index incorporating mainstream manufacturing firms with superior environmental credentials, and has tracked the Verdurous India Index since 1 January 2006.

Verdurous had undertaken the independent assessment and Meta Analysis of a portfolio of climate-friendly investments made by AusAID among the Pacific Island Nations.

**The Clean Energy Financial Institution** (later the Clean Energy **Development Bank was** constituted to route investments into climate-friendly projects in Nepal including runof-the-river hydro power, solar PV, cleaner urban transport etc. Verdurous was deputed by the FMO and Triodos Bank to assess the business opportunity and strategic logic, and to appropriately structure investments into the bank.

In the spirit of involving indigenous peoples and local residents in conservation and regeneration, Verdurous has developed a real-option based methodology to value the consumptive, non-consumptive and existential use of biologically diverse forests and landscapes, and a mechanism to pay for ecological services generated including for carbon sequestration, supply of bushmeat, medicinal plants and herbs, and, for watershed services.

Wind farms are routinely "curtailed" across countries and the installed generation capacity is often under-utilized. With a view to making energy-storage and supply a stand-alone business opportunity, to help with maintaining grid-stability and to striking a balance between demand for, and supply of energy, *Verdurous* has developed an option-based pricing methodology to pay for energy intermediation services.

Verdurous has developed a model to analyze the evolution of electricity as an (export) good traded across national boundaries

With a view to strengthening emission reduction markets and to making them more efficient, Verdurous has designed a synthetic (basket) currency along the lines of the IMF – SDR that also puts more power in the hands of the emission credit sellers

A widely-cited research paper on pricing and incentive structures based on in-house research at *Verdurous* contributed to bringing bio-fuels out of the shadows of food crops. Verdurous undertook the independent assessment of investments into developing agriculture value chains in Kenya and Tanzania, made by the OPEC Fund for International Development ("OFID"). The detailed report submitted to Vienna, Austria based REEEP was very well received.

Under assignment with the UNDP / UNCDF Verdurous personnel facilitated and led a capacity building workshop for Renewable Energy entrepreneurs in Ethiopia

Under assignment with Social Impact, the Verdurous team has provided inputs for USAID India's cleaner energy program strategy in the country. John Stephen Akhwari "..the greatest last place finish ever"

Cramped, badly injured and with a dislocated knee, in pain but determined to finish, the Tanzanian made it across the finish line in 3:25:27 at the 1968 Mexico City Olympics – last of 57 athletes to complete the marathon – over 1 hour after Ethiopian Mamo Wolde had taken gold.

> "My country did not send me 5,000 miles to start the race; they sent me 5,000 miles to finish the race." -John Stephen Akhwari

