

JECO Caribbean

Environmental Managers & Development Consultants

Established 1995



ENVIRONMENTAL ENGINEERS, SCIENTISTS, ECONOMISTS, LAWYERS

Solutions for Sustainable Integrated Development

JECO

Caribbean



JECO CARIBBEAN GROUP OF DEVELOPMENT COMPANIES

- Jessamy Environmental Consulting & Research Caribbean
- Environmental Testing Services
- Waste Management Solutions Inc
- Caribbean Sun Energy Ltd
- JECO Caribbean Landscaping
- Miscard Eco-Garden & Nursery

Established 1995, JECO Caribbean provides a multi-disciplinary environmental consultancy service for all stages of the project cycle from preparation and feasibility to construction, operation, maintenance and capacity building.

As the first environmental consulting group in Grenada, JECO has distinguished itself as a leader in providing practical innovative and cost-effective solutions to a wide spectrum of environmental problems. The number of repeat assignments held with clients is testimony of the high quality of consulting service and advice provided by our team of engineers and environmental specialists.

JECO team of consultants is drawn from our international and Caribbean network of associates and combined have more than 75 years of experience in various environmental disciplines. We understand that no two projects are the same. As such the JECO consulting approach is project driven and our team of specialists are brought together to suit the specific needs of the project and the client.

From our extensive multi-project field experience, we have learnt the benefit of sound project management to ensure delivery of desired outcomes. We are able to mobilize quickly and work efficiently in difficult circumstances with limited facilities. Our combination of core staff and associate specialist staff expertise has proved to be an effective approach to deliver quality service at low costs.

To maintain our reputation for delivering technically sound solutions, on time and within budget, our services are delivered through the *JECO Caribbean Group of Development Companies*.

Environmental Assessments

JECO Caribbean is at the forefront of environmental consulting firms in development consulting and environmental management for both new projects and existing facilities. Our staff has up-to-date knowledge of local, regional and international environmental regulations and has participated in the policy formulation process for national and regional environmental management standards. JECO environmental assessment specialists conduct all phases of site environmental assessments and audits to include:

- Preliminary Site Evaluations
- Environmental and Social Impact Assessments
- Phase I and Phase II Property Audits
- Sampling and Monitoring Programs
- Subsurface Soil Investigations
- Marine and Oceanographic Surveys
- Occupational Safety and Health Audits
- Regulatory Compliance Evaluations



Environmental Testing



JECO Caribbean is equipped with modern computer systems, in-house and field labs with state of the art equipment and capability to monitor physical, chemical and biological parameters of both aquatic and terrestrial systems. Specialist probes and meters are utilized to sample air, water, soil, noise, as well as biological and chemical environmental contaminants. Our areas of expertise include:

- Emissions Testing
- Source Emissions Modeling
- Dispersion Modeling
- Ambient Air Monitoring Program
- Meteorological Data Collection and Processing
- Indoor Air Quality
 - Gases, particulates, bacteria, fungi, mould
- Water Quality Testing
- Soil Evaluation and Percolation Tests
- Noise Monitoring

Waste Management Solutions



Understanding the natural law that matter is neither created nor destroyed, JECO Caribbean team of environmental engineers, scientists and economists recognize that the by-products of human development activities are valuable commodities. As engineering consultants our approach to waste management is based on the 4Rs, reduce, reuse, recycle, recover. In addition to providing the best practical environmental options (BPEO) for effective waste management to our clients, JECO is also in the business of recycling, transforming and returning materials back into the development cycle. Through our subsidiary company Waste Management Solutions Inc the following services are provided:

- Waste Management Planning and Landfill Site Searches
- Landfill Closure Plans
- Waste Handling Assessments
- Composting and Paper Recycling
- Oil Handling and Disposal
- Characterization and Treat-ability Studies
- Design and Construction of Onsite Wastewater Treatment Systems (including constructed wetlands, ponds, trenches)
- Sizing and Installation of Packaged Wastewater Plants
- Design and Implementation of Monitoring Plans
- In-house Laboratory Support



Watershed Management



JECO Caribbean specialists apply their planning, engineering, ecological and scientific skills together with the latest computer modeling tools and field evaluation techniques to develop practical watershed management solutions for our clients. Our capabilities include:

- Geographic Information Systems (GIS)
- Hydrologic and Hydraulic Modeling
- Subwatershed Planning
- Design of Stormwater Management and Conveyance Systems
- Shoreline Erosion and Flood Control
- Water Quality Assessment and Improvement
- Wetland Management and Mitigation Plans
- Floodplain Mapping and Field Surveys

Natural Hazard Assessment



At the core of natural hazard mitigation is environmental management and planning. JECO Caribbean specialists have undertaken post-graduate training in natural hazard mitigation and have implemented projects designed to reduce natural disasters. Our areas of expertise include:

- Rapid Community Vulnerability Assessment
- Hazard Impact Assessment
- Environmental Damage Assessment
- Hazard Mitigation Plans
- Natural Hazard Risk Analysis
- Predicting Climate Change Future Scenarios
- Business Disaster Management Plans

JECO Landscaping



We find no greater pleasure than to practice what we preach. Our team of ecologists and environmental horticulturalists has integrated good science, technology, and our skills as educators to develop Miscard Eco-Garden and Nursery – an oasis from the hustles of everyday life. JECO Caribbean also extends this service to our clients and the general public:

- Professional Landscape Design
- Native and Tropical Plants Nursery
- Soil treatment and enhancement
- Shredding and composting
- Implementation of Landscaping Projects

Communication & Education



Increasingly stakeholders are holding governments and businesses responsible for sustainable and wise use of our natural resources. JECO Caribbean has developed a legacy of effectively communicating environmental quality to a wide cross section of audiences through print and electronic media. While educating general audiences and employees of corporations, we also assist our clients with public relations and consultations. Our services include:

- Public Awareness and Education
- Stakeholder Consultations
- Technical Business Workshops and Seminars
- On-site Employee Training Programs
- Weekly Radio Programs (often client sponsored)
- TV Magazine – Designing & Living with Nature
- Print Magazine – *L'Ecologist* Caribbean Guide to Healthy Living

Caribbean Sun Energy Ltd.



Since 2004 we have been conducting research on the application of solar technology in Grenada. We understand the dos and don'ts and can provide advice on a range of system options and configurations to suit individual needs based on location, energy requirements and financial capability.

Lessons learnt from the construction of our first green building Home of L'Ecologist will be adopted to construct a solar building which will serve as the headquarters of our parent company JECO Caribbean Inc. The building will feature passive cooling, PV system, indoor garden with recycled water. Miscard Eco-Garden and Nursery is powered by solar systems.

The company's mission is simple: *"To promote environmental sustainability and improve quality of life in the Caribbean through wise energy use"*. Other services provided include:

- Energy Audits
- Education
 - Energy conservation
 - PV Technology
- Solar System Design and Installation
- Green Building Design
- Impact Assessment of Energy Systems



Installation of solar system donated to needy family in Grenada

Profile of Principal



Dr. Valma R. Jessamy

Professional Affiliations & Memberships

- Caribbean Water and Wastewater Association
- International Natural Hazards Society
- National Sustainable Development Council, Grenada
- American Association of Quality, USA
- Order of the Engineer (Inducted 1995) University of Florida, USA
- Active Member Beta-Beta-Beta – Sigma Nu Chapter, National Biological Honor Society, USA

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Dr. Valma Jessamy is the founder and executive director of JECO Caribbean and its subsidiary companies. She received her doctorate in environmental sciences from the School of Environmental Sciences, University of East Anglia, UK where she was a Commonwealth Scholar from October 2000 to September 2003.

In 1999 Dr. Jessamy received a post-graduate certificate in Environmental Economics and Policy Analysis from Harvard University, USA. Her Masters degree in Environmental Engineering Sciences was obtained from the College of Engineering, University of Florida where she worked as a graduate research scientist funded by the Florida Institute for Phosphate Research.

From 1990 to 1993 she was an OAS/SPECAF and James Meredith Leadership Scholar at the University of Tampa, where she obtained a Bachelors degree with double majors in marine science/ecology. She is the recipient of several awards and commendations including Who's Who Among Students in American Universities and Colleges and the USA Today All Academic Team Award.

Dr. Jessamy is an Honorary Fellow of the Center for Social and Economic Research on the Global Environment, University of East Anglia. She has provided consulting services to several governments, development agencies and private sector organizations, and lectures at the University of the West Indies (UWI) Centre for Resource Management and Environmental Studies (CERMES), Barbados.

She is the author of several journal publications and authored the Paper "Implementation of the Small Island Developing States Program of Action 10 years later: An OECS Perspective". Her doctoral thesis presented an integrated framework for natural hazard mitigation and development planning in the Eastern Caribbean.

Dr Jessamy is a Founding Director of Conservation Grenada Inc, a non profit voluntary environmental organization, which JECO Caribbean funded during its first year of operation.

Our Mission

has remained consistent:

"To empower Caribbean peoples to live well in harmony with their environment, through our writings, speeches, consulting services and eco-products"