

# Green

## My Business



## A simplified checklist to help you:

1. Monitor Energy Consumption and enable Energy Conservation and Energy Cost Savings
2. Reduce waste through efficient material usage, recycling and upcycling
3. Promote and propagate an energy and safety conscious culture within all levels and aspects of the organization
4. Promote community improvement, environmental stewardship and preservation of the earth's natural environment
5. Reduce greenhouse gas emissions and global warming through the use of alternative energy sources

## Building Design/Siting

### **Building orientation and siting**

- |   |  |                          |
|---|--|--------------------------|
| 1 | The building has been oriented to take advantage of the natural wind flow for ventilation.   | <input type="checkbox"/> |
| 2 | Natural daylighting has been optimised (through use of appropriately positioned windows, skylights and translucent roof sheets) while use of artificial lighting has been reduced. | <input type="checkbox"/> |
| 3 | Strategically located trees and other structures have been used to provide shading to the building.  | <input type="checkbox"/> |
| 4 | Sufficient spacing between the structures has been allowed to enable natural ventilation and shading.  | <input type="checkbox"/> |

### **Building Design and Construction**

- |   |   |                          |
|---|---|--------------------------|
| 5 | <p>The building has/had been designed for its current use.</p> <p><i>This reduces the requirement of retrofitting which can lead to resource wastage.</i></p> <p><i>Allow sufficient time for effective designing of the building/facility using schematic drawings and modeling software as this limits subsequent costly modifications during and after construction.</i></p> | <input type="checkbox"/> |
| 6 | <p>The construction stages have communicated to the contractor to minimize waste, rework and resource optimization during the construction phase.</p> <p><i>Avoid single use materials and lumber etc., and encourage multiple use and recycling of lumber for formwork and subsequent incorporation as part of the building design as much as possible.</i></p>                | <input type="checkbox"/> |

7	The building has been designed to cater for the implementation of renewable energy and energy efficient technologies.	<input type="checkbox"/>
8	The roof has a gentle slope and is structurally sound for mounting Solar PV and Solar Thermal (Hot water) Systems.	<input type="checkbox"/>
<b><u>Building materials and technology</u></b>		
9	Windows and other areas of ingress and egress are effectively sealed when closed to reduce heat loss during the evening and heat gain during the day.	<input type="checkbox"/>
10	Eaves and canopies have been incorporated around the building to reduce heat absorption and improve cooling in the building.	<input type="checkbox"/>
11	Suitable window glazing has been employed to optimize natural lighting while minimizing heat loss/gain.	<input type="checkbox"/>
12	The roof and exterior walls of the building have been painted using light colours to reduce solar heat gain.	<input type="checkbox"/>
13	Use of insulation to reduce the thermal mass of the building.	<input type="checkbox"/>
14	Electrical systems and plumbing have been designed to enable ease of incorporation of renewable energy and energy efficient technologies.	<input type="checkbox"/>
15	Areas of the building that require artificial cooling, air conditioning, have been properly sealed.	- <input type="checkbox"/>



16	Door sweepers are being used to reduce air exfiltration.	<input type="checkbox"/>
17	Sustainable, locally-sourced and climate suitable building materials have been used as much as possible. <i>Use of building materials that are indigenous to Guyana will reduce the overall carbon footprint of construction (e.g. use of local hardwoods instead of imported woods would reduce cost of transportation and logistics and carbon footprint associated with such imports).</i>	<input type="checkbox"/>
18	Robust and suitable quality building materials have been used in the building's construction. <i>This will reduce rework/retrofitting in the future. Cheap, poor quality building materials can lead to costly repairs later.</i>	<input type="checkbox"/>
<b>Water Usage</b>		
19	Use of rainwater harvesting techniques have been implemented to offset the requirement for water pumping and water usage from municipal sources.	<input type="checkbox"/>
20	Reducing and reuse of water has been employed where appropriate and feasible e.g. for toilet flushing, watering of plants etc.	<input type="checkbox"/>
21	Low-flow toilets have been installed to reduce the share of water used in restrooms.	<input type="checkbox"/>
22	Regular maintenance of water systems is scheduled to prevent wastage due to leakage in faulty taps, etc.	<input type="checkbox"/>
23	Signs have been installed as reminders to conserve water while washing hands and brushing teeth.	<input type="checkbox"/>

## Energy Use and Consumption

24	Solar Water Heater(s) have been installed where appropriate. <i>Energy generation should be based as much as possible on clean, renewable, alternative sources of energy.</i>	<input type="checkbox"/>
25	Solar Photovoltaic systems and/or wind turbines have been installed where appropriate. <i>Off-grid or grid-interactive solar/wind Systems or Hybrid Systems could significantly reduce long-term energy costs and cost of production/doing business. Self-generators using renewable energy and battery storage have the benefit of grid-independence which reduces the effects of grid fluctuations and outages on the critical production/service activities.</i>	<input type="checkbox"/>
26	Bio-energy system installed: biogas, waste-to-energy (animal waste, wood-waste, rice husk, etc.) <i>Consider biogas production if significant solid waste is produced from the business activities. This can produce gas for cooking, heating or power generation.</i>	<input type="checkbox"/>
27	Steps have been put in place to ensure that Energy efficient appliances/devices (e.g. Energy Star Rated Appliances) are used appropriately:	<input type="checkbox"/>
28	- Energy Efficient Inverter Air-Conditioners	<input type="checkbox"/>
29	- Energy Efficient Light Emitting Diode (LED) lights are used	<input type="checkbox"/>
30	- Energy Efficient Motors	<input type="checkbox"/>
31	Use of Solar Powered LED lights for Perimeter/security lighting	<input type="checkbox"/>

32	Optimise energy consumption of appliances/equipment by monitoring running/downtime and switching off devices when not in use and limit parasitic loading.	<input type="checkbox"/>
33	- Occupancy sensors	<input type="checkbox"/>
34	- Equipment timers	<input type="checkbox"/>
35	- Thermostats	<input type="checkbox"/>
36	- Power strips	<input type="checkbox"/>
37	- Switched socket outlets	<input type="checkbox"/>
38	Extractor fans are installed in the roof and walls to assist in removal of heat where appropriate.	<input type="checkbox"/>
<b>Transportation Services</b>		
39	Purchase and use of electric or hybrid vehicles	<input type="checkbox"/>
40	Purchase and use fuel efficient vehicles, maintain vehicles to ensure optimum operation	<input type="checkbox"/>
<b>Equipment Maintenance</b>		
41	Conduct periodic cleaning and preventive maintenance on equipment such as air-conditioners, motors, pumps, etc. for optimum efficiency of operation, reduced downtime etc. Building wiring installation complies with the NEC 2014	<input type="checkbox"/>

## Energy Monitoring Systems and Standardisation

42 Monitor and record the energy consumption of the business activities by using accurately calibrated energy meters, conducting regular energy audits and implementing energy saving recommendations ☐

43 Employ the use of Energy Management System and building automation devices to reduce the building/facility energy consumption ☐

44 Facility is compliant with ISO 50001 Energy Management Standard ☐

An Energy Management Policy is in place

## Resources Usage and Waste Management

45 Implement a zero-waste mindset into the culture of the organization. Use standards where applicable. ☐

46 Separate garbage into various bins to ensure ease of disposal and to facilitate recycling/upcycling as much as possible. ☐

47 Train employees in efficient materials and resource management e.g. accurate measuring of all raw materials and finished products and recycling practices. ☐  
Incorporate standards for materials used in processes and conduct regular monitoring and evaluation in order to ensure standards are being maintained e.g. quantity of water used in production of a certain volume of product

48 Use highly resource efficient processes and equipment e.g. automation to reduce rework and wastage. ☐

49 Implement a programme for rewarding employees for effective stewardship of resources. ☐

## Management of Employees

50	Incorporate "green management" mechanisms within the organizational structure to facilitate human resource management such that it considers workers' understanding and relation to energy, management of the resources of the organization and the overall business processes.	<input type="checkbox"/>
51	Educate staff on the benefits of energy management (e.g. turning off lights when not in use, shutting down appliances at the end of the workday).	<input type="checkbox"/>
52	Utilise regular reminders (postings) of the relevance and benefits of greener operation	<input type="checkbox"/>
53	Implement an "Energy Champion" in the organisation to foster and promote green business practices	<input type="checkbox"/>
54	Incorporate the financial benefits of the greening programme into the employees' compensation packages	<input type="checkbox"/>
Count the number of Checked Boxes: TOTAL SCORE out of 54 =		

**In Guyana, Greening your business is aligned with the country's Low Carbon Development Strategy 2030 which addresses:**

1. Creating New Incentives for a Low-Carbon Economy
2. Stimulating Future Growth through Clean Energy and Low-Carbon Development
3. Protecting against Climate Change and Biodiversity Loss
4. Aligning with Global Climate and Biodiversity Goals

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# Notes

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For more information, please contact the  
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