




Renewable Energy on Campus Checklist

Three common types of green initiatives on campuses are Solar, Wind and Geothermal. Consider the following items (including but not limited to):

Project Development Process	 Solar	 Wind	 Geothermal
Planning <ul style="list-style-type: none"> • Site Selection • Environmental Reviews • Economic Modeling • Permitting 	<ul style="list-style-type: none"> • Current industry standards (e.g. NFPA 1, NFPA 70 and American Society of Civil Engineers, etc.) • Local / State Codes • Structural analysis by a professional engineer • Fire department pre-planning • Accessibility to roof • Contingency plans 	<ul style="list-style-type: none"> • Due diligence report includes: <ul style="list-style-type: none"> ○ Proven technology ○ Match available wind resource & other weather considerations ○ Maintenance budget funding ○ Warranty • Environmental considerations (e.g. migratory paths of birds) • Proximity to buildings, walkways 	<ul style="list-style-type: none"> • Determine site selection • Consider environmental reviews • Complete economic modeling • Obtain proper permit(s) • Pump location / accessibility • Equipment accessibility
Installation <ul style="list-style-type: none"> • System Procurement • Construction Contracting • Permitting / Final Inspection 	<ul style="list-style-type: none"> • Installation by a certified contractor (NABCEP) • 3rd party inspections & commissioning • Inspections by Authority Having Jurisdiction (AHJ) 	<ul style="list-style-type: none"> • Selection and hiring of experienced contractor • Contractual Risk Transfer • Site Security • Accessibility/exposures due to size & weight of components. 	<ul style="list-style-type: none"> • Selection and hiring of experienced contractor • Contractual Risk Transfer • Site Security (trenches)
Maintenance <ul style="list-style-type: none"> • Clearly Defined Maintenance Roles • Consider Contractual Risk Transfer • Post Severe Weather Inspections 	<ul style="list-style-type: none"> • Documented regular inspections • Consistently monitor/manage: <ul style="list-style-type: none"> ○ Wire condition ○ Roof drains ○ Vegetation ○ Thermographic imaging (annually) ○ Arc Faults and other events • Post severe weather inspections 	<ul style="list-style-type: none"> • Include: <ul style="list-style-type: none"> ○ Turbine ○ Blades ○ Lightning protection system ○ Foundation to interconnect ○ Thermographic imaging • Condition based maintenance: <ul style="list-style-type: none"> ○ Vibration monitoring ○ Oil analysis • Warranty coverage • Availability of spare parts/service contractors 	<ul style="list-style-type: none"> • Clearly defined maintenance roles • Contractual Risk Transfer • Spare parts • Service contractors (e.g., pump maintenance)

For additional information, contact your **Travelers** representative.