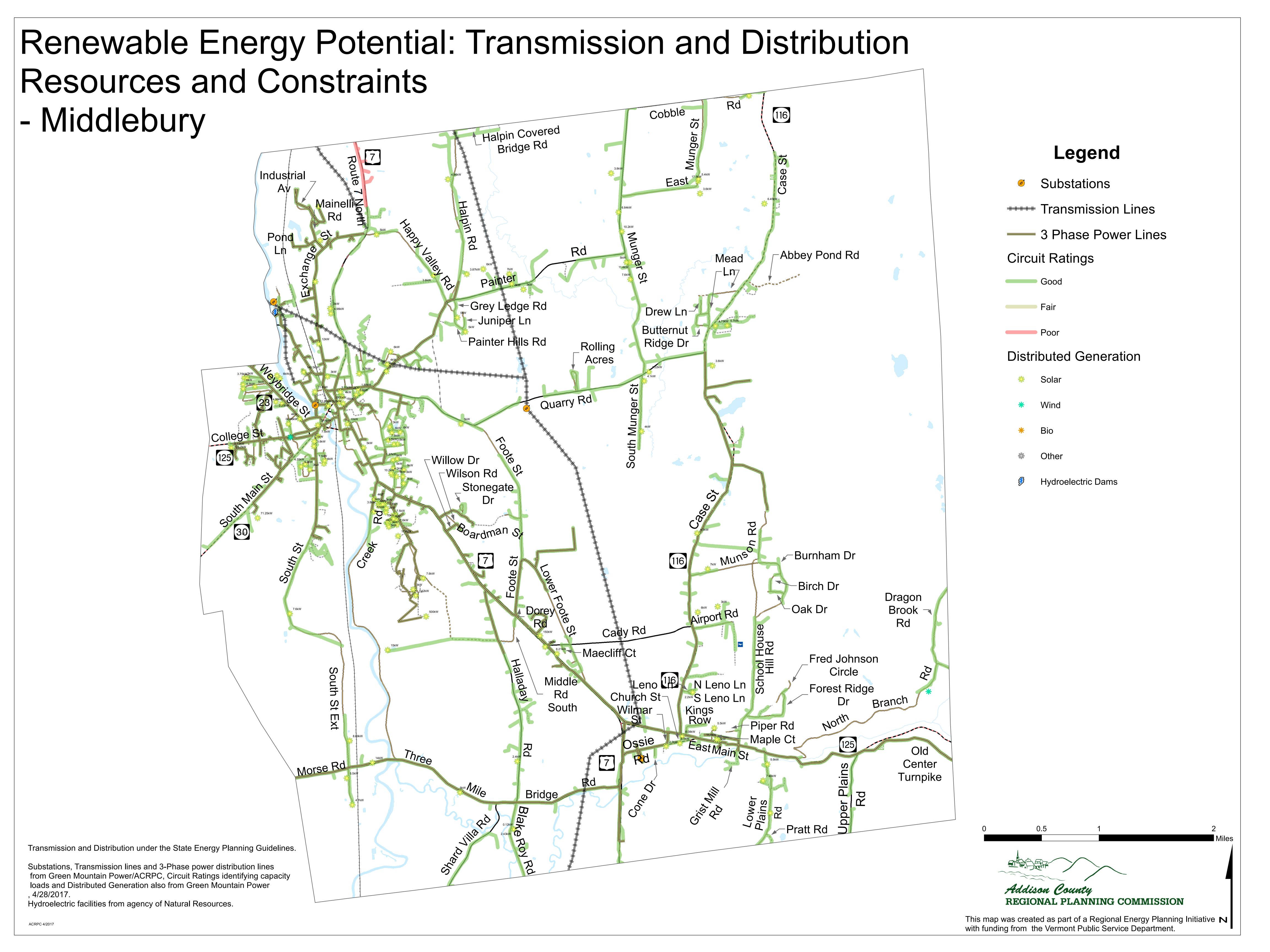
Renewable Energy Planning: Known Constraints - Middlebury Cobble 116 Halpin Covered Bridge Rd Industrial Legend East Mainelliz Halpin Rd Vernal Pools (confirmed and unconfirmed layers) Pond State River Corridors (inc 50ft buffers on sm streams) -Abbey Pond Rd Mead FEMA Floodways Painter Natural Communities and Rare, Threatened and Endangered Grey Ledge Rd Drew Ln-Vermont Significant Wetlands (Class 1 & 2 and advisory layers) Juniper Ln Butternut Ridge Dr National Wilderness Areas Painter Hills Rd $_{\mathsf{Rolling}}$ Acres Quarry Rd College St____ 125 -Willow Dr Wilson Rd Stonegate * Rd Soardman S Munso −Burnham Dr 7 -Birch Dr Dragon Oak Dr Brook ¬ Airport Rd Cady Rd -Maecliff Ct Fred Johnson Halladay Circle Leno Lie N Leno Ln Middle Forest Ridge Church St-S Leno Ln South Wilmar Kings Row Piper Rd Ossie East Main St Three Morse Rd Center Turnpike Bridge Known Constraints (State Energy Planning Guidelines) Vernal Pools (confirmed and unconfirmed) DEC River Corridors (inc stream 5oft buffer) FEMA Floodways State Significant natural Communities and Rare, Threatened and Endangered Species Addison County National Wilderness Areas Class 1 and Class 2 Wetlands (VSWI and advisory layers) REGIONAL PLANNING COMMISSION Regionally or Locally Identified Critical Resources (none currently) This map was created as part of a Regional Energy Planning Initiative N with funding from the Vermont Public Service Department. ACRPC 4/2017

Renewable Energy Planning: Possible Constraints - Middlebury 116 Cobble Halpin Covered Bridge Rd Legend Industrial East Agricultural Soils FEMA Special Flood Hazard Areas Protected Lands Abbey Pond Rd Mead Agricultural Soil Mitigation (Act 250) Deer Wintering Areas Grey Ledge Rd Drew Ln **Highest Priority Forest Blocks** Juniper Ln Butternut Painter Hills Rd Hydric Soils Ridge Dr Rolling Acres Quarry Rd South Munger -Willow Dr Wilson Rd Stonegate Burnham Dr 116 Birch Dr Dragon Oak Dr Airport Rd Brook Leno Life N Leno Ln Cady Rd Maecliff Ct Fred Johnson Halladay South St Ext Circle Forest Ridge S Leno Ln Church St South Wilmar Piper Rd East Main St Ossie Morse Rd Center Turnpike Mile Bridge Pratt Rd Possible Constraints (State Energy Planning Guidelines) Agricultural Soils (Prime, Statewide and Local USDA) FEMA Special Flood Hazard Areas Protected Lands (State fee lands and prvt cons lands) Act 250 Agricultural Soil Mitigation areas Deer Wintering Arreas Addison County ANR's Vermont Conservation Design Highest Priority Forest Blocks Hydric Soils **REGIONAL PLANNING COMMISSION** Regionally or Locally Identified Critical Resources (none currently) This map was created as part of a Regional Energy Planning Initiative with funding from the Vermont Public Service Department.



Renewable Energy: Potential Solar Resource Siting Areas - Middlebury 116 **Dept of Public Service Methodology** Halpin Covered Bridge Rd This map shows areas of resource potential for renewable energy generation from solar, i.e. locations where renewable energy generation would likely be most feasible according to the natural conditions of an area. This map also considers various other conditions, such as natural resource areas, East that may impact the feasibility of renewable energy development. These conditions are referred to as constraints. Areas of prime solar potential exist where the natural conditions make development feasible and no constraints exist. **Known Constraints** Pond Abbey Pond Rd Known Constraints signal likely, though not absolute, unsuitability Mead for development based on statewide or local regulations or designated critical resources. Known Constraints include: Vernal pools, FEMA floodways, river corridors, Federal wilderness areas, Natural Communities and Rare, Grey Ledge Rd Threatened and Endangered Species, and wetlands (class 1 and 2) and wetland advisory layers. Juniper Ln Butternut These areas have been removed and are not shown on -Painter Hills Rd Ridge Dr Rolling this map. **Possible Constraints** Possible Constraints signal conditions that would likely require mitigation, and which may prove a site unsuitable after Quarry Rd site-specific study, based on statewide or regional/local policies that are currently adopted or in effect. Possible Constraints include: Agricultural soils, FEMA flood areas, College St. Protected Lands, ACT 250 soil mitigation areas, Deer wintering areas, Highest Priority Forest Blocks, and Hydric soils. These areas are shown on the map where they coincide with areas of renewable solar potential identified in the solar analysis. Burnham Dr 116 Birch Dr Dragon Oak Dr Airport Rd Brook ¬ Fred Johnson Halladay Circle Legend Forest Ridge S Leno Ln Branch Primary Solar Resource Siting Areas Kings -Piper Rd Secondary Solar Resource Siting Areas Maple Ct Ossie East Main St Old Three Morse Ra Center Turnpike Lowe_l Plains Sadillard Pratt Rd Solar Potential Analysis under the State Energy Planning Guidelines. Statewide ground based (30m USGS DEM) solar potential layer created with ESRI solar analyst by VCGI. Filtered by SLOPE (<= 14%), Addison County ASPECT (90-270 degrees) and values >= 1,000 kWh/sq meter. **REGIONAL PLANNING COMMISSION**

ACRPC 4/2017

This map was created as part of a Regional Energy Planning Initiative with funding from the Vermont Public Service Department.

Renewable Energy: Potential Wind Resource Siting Areas - Middlebury **Dept of Public Service Methodology** Cobble 116 This map shows areas of resource potential for renewable energy generation from wind, i.e. locations where renewable energy generation would likely be most feasible according to the natural conditions of an area. This map also considers various other conditions, such as natural resource areas, that may impact the feasibility of renewable energy development. Industrial East These conditions are referred to as constraints. Areas of prime wind potential exist where the natural conditions make development feasible and no constraints exist. **Known Constraints** Pond Known Constraints signal likely, though not absolute, unsuitability for development based on statewide or local regulations or Abbey Pond Rd Mead designated critical resources. Known Constraints include: Vernal pools, FEMA floodways, river corridors, Federal wilderness areas, Natural Communities and Rare, Threatened and Endangered Species, and wetlands (class 1 and 2) and wetland advisory layers. Grey Ledge Rd These areas have been removed and are not shown on Dutternut this map. Painter Hills Rd Ridge Dr Rolling **Possible Constraints** Acres Possible Constraints signal conditions that would likely require mitigation, and which may prove a site unsuitable after site-specific study, based on statewide or regional/local policies Quarry Rd that are currently adopted or in effect. Possible Constraints include: Agricultural soils, FEMA flood areas, Protected Lands, ACT 250 soil mitigation areas, Deer wintering areas, Highest Priority Forest Blocks, and Hydric soils. These areas are shown on the map where they coincide with Villow Dr areas of renewable wind potential identified in the wind analysis. Wilson Rd Stonegate , Poardman S Burnham Dr 116 Birch Dr Dragon Oak Dr Airport Rd Brook ¬ -Maecliff Ct Fred Johnson alladay Circle Leno 116 N Leno Ln Forest Ridge Church St-S Leno Ln Branch , South Wilmar Legend Morti, -Piper Rd -Maple Ct Ossie East Main St Primary Wind Resource Siting Areas Old Morse Rd Center Secondary Wind Resource Siting Areas Turnpike Rd Lower Plains Rd Pratt Rd Wind Potential Analysis under the State Energy Planning Guidelines. Statewide 30m, 50m, and 70m wind speed layers from Mass. Tech Collaborative wiere filtered for minimum wind speed, Addison County then merged into a single file by VCGI. REGIONAL PLANNING COMMISSION This map was created as part of a Regional Energy Planning Initiative N with funding from the Vermont Public Service Department. ACRPC 2/2017

Renewable Energy: Potential Woody Biomass Resource Siting Areas - Middlebury 116 Cobble Halpin Covered Bridge Rd **Dept of Public Service Methodology** This map shows areas of resource potential for renewable energy generation from woody biomass, i.e. locations where renewable energy generation would likely be most feasible <mark>Indus</mark>tria East according to the natural conditions of an area. This map also considers various other conditions, such as natural resource areas, that may impact the feasibility of renewable energy development. These conditions are referred to as constraints. Areas of prime woody biomass potential exist where the natural conditions make development feasible and no constraints exist. Pond **Known Constraints** -Abbey Pond Rd Mead Known Constraints signal likely, though not absolute, unsuitability for development based on statewide or local regulations or designated critical resources. Grey Ledge Rd Known Constraints include: Vernal pools, FEMA floodways, river corridors, Federal wilderness areas, Natural Communities and Rare, Threatened and Endangered Species, and wetlands (class 1 and Butternut Painter Hills Rd and wetland advisory layers. Ridge Dr Rolling These areas have been removed and are not shown on Acres this map. **Possible Constraints** Quarry Rd Possible Constraints signal conditions that would likely require mitigation, and which may prove a site unsuitable after site-specific study, based on statewide or regional/local policies that are currently adopted or in effect. College St Possible Constraints include: Agricultural soils, FEMA flood areas, 125 Protected Lands, ACT 250 soil mitigation areas, Deer wintering areas, Highest Priority Forest Blocks, and Hydric soils. Wilson Rd These areas are shown on the map where they coincide Stonegate with areas of renewable woody biomass potential. Boardman's Burnham Dr 116 Birch Dr Dragon Oak Dr Brook Airport Rd Cady Rd -Maecliff Ct Fred Johnson Halladay School South Circle Leno III N Leno Ln Middle Forest Ridge Church St-S Leno Ln Branch South Wilmar Legend Piper Rd Maple Ct Ossie East Main St Primary Biomass Siting Areas Old Three Morse Rd Center Secondary Biomass Siting Areas Turnpike Rd Bridge Lower Plains Rd Saldillard Pratt Rd Woody Biomass Potential Analysis under the State Energy Planning Guidelines. Statewide forest cover types from the 2006 National Land Cover Dataset (NLCD, 2006) were merged into a single file and used to Addison County calculate low-grade green tons per acre by VCGI. The forest cover areal extent was used in this analysis. REGIONAL PLANNING COMMISSION This map was created as part of a Regional Energy Planning Initiative Ν with funding from the Vermont Public Service Department. ACRPC 4/2017