



## North Carolina Department of Revenue

Beverly Eaves Perdue  
Governor

David W. Hoyle  
Secretary

February 15, 2011

### MEMORANDUM

TO: County Assessors

FROM: David B. Baker, Director  
Local Government Division

RE: Solar Energy Electric Systems

This memorandum is intended to address the taxability and assessment of Solar Energy Electric Systems, more commonly referred to as photovoltaic (PV) systems. These systems convert solar energy directly to electricity. Photovoltaic systems may or may not be taxable, depending on the ownership and use. Per G.S.105-275(45), photovoltaic systems that are taxable are subject to an 80% exclusion of the appraised value of the system.

Solar energy heating or cooling systems are different from photovoltaic systems in that they use solar energy to provide **heating or cooling** by way of heat exchangers utilizing a fluid transfer system, and do not generate electricity. The appraisal and assessment methodology for these solar energy heating or cooling systems is addressed in G.S. 105-277(g).

The position of our office is that photovoltaic systems are taxable, subject to the 80% exclusion, unless they are excluded as non-business personal property pursuant to G.S. 105-275(16). Therefore, systems owned by individuals and **not** used to produce income or in connection with a business are not taxable. Photovoltaic systems installed on a private residence may fit into either category. Photovoltaic systems installed on the premises of a business will normally be business personal property and therefore taxable.

In determining if a photovoltaic system installed on residential property is taxable or not, the county must determine if it is used to produce income or in connection with a business. If the owner files a Schedule C on their income tax return and claims depreciation expense on the capital investment amount, the system is business personal property. If the owner is recognizing

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income received from a utility company for the production of electricity, the system is business personal property. If the owner is not claiming depreciation on the system and is not recognizing income, but rather is receiving credits from their utility company through a net metering arrangement, the property is considered non-business personal property and is excluded from taxation pursuant to G.S. 105-275(16). The owner of the property can provide the information needed by the county to determine taxability. Copies of tax returns, receipts and bills of sale for the system equipment, and arrangements between the owner and the utility company are good sources of information to request to help with the determination.

Please contact our office at 919-733-7711 if you have questions or need further assistance.