

## Sector Briefs

# Renewable Power & Energy Efficiency

### Overview & Objectives

As concerns over carbon levels in the atmosphere and related impacts of climate change grow, so does support for low carbon, clean energy sources. Renewable energy capacity has risen to 16.7%<sup>1</sup> of the energy mix, and current global investment in new renewable energy projects exceeds investment in new fossil fuel fired power plants.

These alternative energy sources include wind, solar, geothermal and biomass power generation as well as newer approaches such as fuel cells, and next generation biofuels. Additionally, investments in energy efficiency improvements are considered an energy “source” by reducing demand and freeing up additional capacity of the existing power grid. While these renewable sources provide climate benefits, they are not without environmental risks and trade-offs, such as the large land requirements for large-scale solar and wind farms, correlated increasing food prices associated with biofuels, and seismic concerns with some geothermal developments.

Citi’s Alternative Energy team has already achieved meaningful success in established successes in financing large-scale wind farms and solar projects, as well as distributed rooftop solar. Citi is also a recognized leader in energy efficiency market development and thought leadership. In addition to these established competencies, we will continue to position ourselves to support emerging alternative energy technologies as they become commercially viable and deployed at scale.

Under this Energy & Power Sector Roadmap, our objectives in renewables and energy efficiency are two-fold:

- To leverage our existing institutional knowledge to develop a strategy that protects Citi from emerging risks while positioning us as a leader;
- Help catalyze the energy efficiency finance market, to establish it as a new asset class, and to be a market leader with respect to both finance solutions and thought leadership.

### Scope & Links to Policy

Citi’s Environmental and Social Risk Management (ESRM) Standard covers transactions for renewables and energy efficiency when proceeds are directed toward a specific asset or business. For new projects or expansion of existing projects, an Environmental and Social Impact Assessment is required. In emerging markets, projects must comply with the IFC Performance Standards and, when relevant, Environmental, Health and Safety Guidelines on Wind Energy and Geothermal Power Generation.

These transactions also count towards Citi’s \$50 Billion Climate Initiative. Mobilization of funds in support of this initiative is reported on annually in the Citi Citizenship Report.

<sup>1</sup>REN21 Renewables Global Status Report (2012)

### Key Sector Issues

For clients in renewable power sectors, Citi will consider the following issues in accordance with the ESRM Standard:

- **Siting** – identification of proper siting for renewable projects is key; for example, wind farms need to be located outside of key bird migratory zones, and geothermal projects should not be located in areas of high seismic activity.
- **Land use and land acquisition** – related to siting is land use, both existing land use and potential alternative land uses, and inclusive of ecological and social land uses; especially in attempts to deploy renewables at scale such as large-scale wind farms or concentrating solar plants, land use and land acquisition processes must be considered.
- **Technology** – how tested is the energy technology? How experienced and credit worthy is the particular manufacturer of the technology?
- **Weather risk** – many renewable technologies depend on the weather for the volume of energy produced – has the client conducted proper studies?
- **Legal and regulatory framework** – the host country legal and regulatory framework will be considered, including any renewables and energy efficiency incentives, and criteria for qualifying for those incentives.
- **Other environmental and social risks** – in accordance with Citi's ESRM Standard, transactions will be reviewed to identify environmental and social risks associated with new construction or expansion.

### Stakeholder Engagement

We engage regularly with stakeholder groups around renewable energy and energy efficiency finance. As a recognized leader in the development of energy efficiency markets, Citi works with partners such as C40 Cities, Ceres, Environmental Defense Fund, and others to develop and implement ways to unlock, catalyze and scale the market for energy efficiency, including the retrofitting of buildings.