Certificate in Energy Law and Policy

# Energy Infrastructure Financing and Investment

Acciona: refers to a Spanish company that specializes in renewable energy and infrastructure, providing a range of services including energy production, transmission, and distribution, with a focus on sustainability and environmental responsibility. Related terms include energy production, transmission, distribution, and sustainability.

Asset Backed Securities: a financial instrument that is collateralized by a pool of assets, such as loans or receivables, and is often used to finance energy infrastructure projects, providing investors with a regular income stream and a level of security. Related terms include asset-backed financing, energy infrastructure financing, and securitization.

Baseload Power: refers to the minimum amount of electric power required to meet the constant demand of a grid or system, typically provided by reliable and constant sources of power such as nuclear or coal-fired power plants. Related terms include peak power, load following, and grid management.

Bioenergy: a form of renewable energy that is produced from organic matter such as wood, waste, or agricultural products, and can be used to generate heat, power, or transportation fuels. Related terms include biomass, biofuels, and sustainable energy.

Capacity Building: refers to the process of developing and strengthening the skills and capabilities of individuals, organizations, or institutions, particularly in the context of energy infrastructure development and sustainable energy projects. Related terms include training, technical assistance, and institutional strengthening.

Carbon Capture and Storage: a technology that captures carbon dioxide emissions from power plants or industrial processes and stores them underground, preventing them from entering the atmosphere and contributing to climate change. Related terms include carbon sequestration, climate change mitigation, and low-carbon technologies.

Climate Change Mitigation: refers to the actions taken to reduce or prevent the emission of greenhouse gases and mitigate the impacts of climate change, including the development and implementation of low-carbon energy technologies and policies. Related terms include climate change adaptation, sustainable development, and environmental protection.

Community-Based Energy: refers to energy systems that are owned, operated, and controlled by local communities, often using renewable energy sources such as solar or wind power, and providing economic and social benefits to the community. Related terms include community wind, community solar, and cooperative energy.

Demand Response: refers to the ability of energy consumers to adjust their energy usage in response to changes in the grid or market conditions, such as during periods of high demand or when renewable

energy is not available. Related terms include demand management, load management, and smart grid.

Distributed Energy: refers to energy systems that are decentralized and distributed across a network, such as rooftop solar or community wind, and can provide energy independence and resilience to communities. Related terms include decentralized energy, distributed generation, and off-grid energy.

Energy Access: refers to the ability of individuals or communities to access reliable and affordable energy services, including electricity, heating, and cooking fuels, and is a critical component of sustainable development. Related terms include energy poverty, energy equity, and universal access.

Energy Efficiency: refers to the use of technology and practices to reduce the amount of energy required to power homes, businesses, and industries, and can be achieved through measures such as insulation, weatherization, and efficient appliances. Related terms include energy conservation, energy savings, and sustainable energy.

Energy Infrastructure: refers to the physical systems and facilities used to generate, transmit, and distribute energy, including power plants, transmission lines, and pipelines, and is critical to the functioning of modern economies. Related terms include energy systems, energy networks, and grid infrastructure.

Energy Investment: refers to the act of investing in energy-related projects or companies, such as renewable energy projects, energy efficiency measures, or energy infrastructure development, and can provide financial returns while supporting sustainable energy development. Related terms include energy financing, energy funding, and impact investing.

Energy Law and Policy: refers to the rules, regulations, and frameworks that govern the energy sector, including laws and policies related to energy production, transmission, and distribution, as well as energy efficiency and renewable energy development. Related terms include energy regulation, energy governance, and policy analysis.

Energy Poverty: refers to the lack of access to affordable and reliable energy services, which can have significant impacts on health, education, and economic development, particularly in rural or disadvantaged communities. Related terms include energy access, energy equity, and universal access.

Energy Storage: refers to the ability to store energy for later use, such as in batteries or other storage technologies, and can help to stabilize the grid, provide backup power, and support the integration of renewable energy sources. Related terms include energy storage systems, battery storage, and grid stability.

Feed-In Tariff: a policy mechanism that allows renewable energy generators to sell their electricity to the grid at a fixed price, providing a predictable revenue stream and incentivizing the development of renewable energy projects. Related terms include feed-in premium, renewable energy support scheme, and policy incentive.

Geothermal Energy: a form of renewable energy that is generated from the heat of the Earth, often used for electricity generation or heating applications, and can provide a reliable and constant source of power. Related terms include geothermal power, geothermal heating, and geothermal cooling.

Green Bond: a type of bond that is specifically used to finance environmentally friendly projects, such as renewable energy or energy efficiency projects, and can provide investors with a low-risk and sustainable investment opportunity. Related terms include green finance, sustainable finance, and environmental investing.

Grid Management: refers to the process of operating and managing the electricity grid, including the coordination of power generation, transmission, and distribution, and the management of grid stability and reliability. Related terms include grid operations, grid control, and smart grid management.

Hydropower: a form of renewable energy that is generated from the energy of moving water, often used for electricity generation or irrigation, and can provide a reliable and constant source of power. Related terms include hydroelectric power, hydro energy, and water power.

Infrastructure Financing: refers to the process of securing funding for the development and implementation of infrastructure projects, such as energy infrastructure, transportation systems, or water treatment facilities, and can involve a range of financing mechanisms and investment instruments. Related terms include project finance, infrastructure investment, and public-private partnerships.

International Energy Agency: an intergovernmental organization that provides energy policy advice and coordination to its member countries, with the goal of promoting energy security, economic growth, and environmental protection. Related terms include energy cooperation, international energy policy, and global energy governance.

Investment Tax Credit: a type of tax incentive that allows companies to claim a tax credit for investments in renewable energy projects or energy efficiency measures, providing a financial incentive for companies to invest in sustainable energy technologies. Related terms include tax incentive, investment subsidy, and renewable energy support.

Levelized Cost of Energy: a measure of the cost of energy generation from a particular source, such as solar or wind power, taking into account the upfront costs, operating costs, and lifecycle of the technology. Related terms include levelized cost of electricity, cost of energy, and energy economics.

Microgrid: a small-scale energy system that combines renewable energy sources, energy storage, and energy management systems to provide reliable and efficient energy services to a local community or organization. Related terms include mini-grid, off-grid energy, and distributed energy.

Net Metering: a policy mechanism that allows renewable energy generators to sell excess energy to the grid and receive a credit on their energy bill, providing an incentive for individuals and businesses to invest in renewable energy technologies. Related terms include net energy metering, renewable energy support, and policy incentive.

Offshore Wind: a form of renewable energy that is generated from wind turbines located in the ocean or other bodies of water, and can provide a significant source of power while minimizing visual impacts and environmental concerns. Related terms include offshore wind farm, marine energy, and renewable energy development.

Onshore Wind: a form of renewable energy that is generated from wind turbines located on land, and can provide a significant source of power while supporting local economic development and rural communities. Related terms include onshore wind farm, wind energy, and renewable energy development.

Power Purchase Agreement: a contract between a renewable energy generator and a power purchaser, such as a utility or corporation, that provides a fixed price for the electricity generated over a defined period, providing a predictable revenue stream for the generator. Related terms include power purchase contract, renewable energy contract, and project finance.

Public-Private Partnership: a partnership between a public entity and a private company to develop and implement an infrastructure project, such as an energy infrastructure project, and can provide a range of benefits including financing, expertise, and risk management. Related terms include public-private collaboration, infrastructure partnership, and project delivery.

Renewable Energy Certificate: a tradable certificate that represents the environmental attributes of one megawatt-hour of renewable energy, such as solar or wind power, and can be used to track and verify the amount of renewable energy generated and consumed. Related terms include renewable energy credit, green certificate, and sustainable energy.

Renewable Portfolio Standard: a policy mechanism that requires utilities or other energy providers to generate a certain percentage of their electricity from renewable energy sources, such as solar or wind power, and can provide a driving force for the development of renewable energy projects. Related terms include renewable energy target, renewable energy mandate, and policy incentive.

Risk Management: refers to the process of identifying, assessing, and mitigating risks associated with energy infrastructure development and investment, such as regulatory risks, technical risks, or financial risks, and can involve a range of strategies and risk management tools. Related terms include risk assessment, risk mitigation, and project finance.

Smart Grid: a modernized electricity grid that uses advanced technologies, such as smart meters and grid management systems, to provide a more efficient, reliable, and sustainable energy system, and can support the integration of renewable energy sources and energy efficiency measures. Related terms include smart grid technology, grid modernization, and energy system innovation.

Solar Energy: a form of renewable energy that is generated from the sun's rays, often used for electricity generation or heating applications, and can provide a significant source of power while minimizing environmental impacts. Related terms include solar power, photovoltaic energy, and renewable energy development.

Sustainable Energy: refers to energy systems and technologies that are environmentally friendly, socially responsible, and economically viable, and can provide a range of benefits including reduced greenhouse gas emissions, improved air quality, and energy security. Related terms include renewable energy, energy efficiency, and sustainable development.

Transmission Line: a high-voltage line that carries electricity from a power plant to a substation or

transmission grid, and is a critical component of the energy infrastructure system, providing the means to transmit power over long distances. Related terms include transmission system, power line, and grid infrastructure.

Wind Energy: a form of renewable energy that is generated from the wind, often used for electricity generation or mechanical power, and can provide a significant source of power while minimizing environmental impacts. Related terms include wind power, wind turbine, and renewable energy development.