Brief Introduction of the Training Course

(Application of Clean Energy Technologies)

1. Study on Large-scale PV Power Plant and Ecological Environment Restoration

The main contents: The background; relationship between PV development and ecological environment; large-scale PV power plant+ecological restoration application; implantation of desertification control, and the potentials of these application in Arab States. Research significance is located at promotion development of PV industry+ecological restoration, establishing a modern clean energy system, so that to achieve the sustainable development and build a community with shared future for mankind.

2. Integrated Smart Energy

The main contents: Overview of integrated smart energy; development background; typical scenarios and case study; business model. The topic describes the comprehensive solution of intelligent performance energy based on the new generation of information technologies such as“Cloud Storage, Big data, Internet of Things, Mobile and Intelligence”. Tightly coupling the power system with conventional energy and industrial,

transportation, building systems, for horizontal realization of renewable energy “synthetic utilization of multi-energy sources” diversity, for vertical realization of “Source, Network, Load, Storage” each link highly synergistic. Two-way interaction between production and consumption, centralized and distributed energy service network, to achieve clean, low-carbon, safe and efficient use of energy. From the “Source, Network, Load, Storage, Control” five aspects of customized integrated energy development strategy.

3. Photovoltaic Empirical Test Platform Research

The main contents: The background and significance of the photovoltaic empirical test platform research; the innovation research of the photovoltaic empirical test platform, which includes six comparison areas, and the comparison research of 148 technologies and types of the same platform; the development research of the Chinese photovoltaic empirical test platform, from power plant design, construction, operation and maintenance, testing, analysis and other aspects are introduced; finally, the development of the photovoltaic empirical test platform, and the possibility of building demonstration projects in LAS countries based on the experience of the Chinese photovoltaic empirical test platform is prospected.

4. New Energy+ Energy Storage+(Hydrogen Production)

The main contents: Overview of global energy development status and trends; introduction of China's energy strategy transformation and direction; and explanation of commercial applications, business models and development bottlenecks of new energy+energy storage/+(hydrogen production), including introduction and comparison of technical routes of new energy+energy storage/+(hydrogen production), outlook of various application scenarios of hydrogen energy, as well as brief description of business case demonstrations and the current technical and commercial development bottlenecks faced.

Course Schedule (Microsoft Teams)

Date	TIME SLOT		SUBJECTS	TRAINER	WORKING LANGUAGE
	Cairo Time	**Beijing Time**			
June 20, 2022	9:30-10:30 (a.m.)	15:30-16:30 (p.m.)	No.1 Study on Large-scale PV Power Plant and Ecological Environment Restoration : Background/Application of Desertification Control/ Multiple Applications of PV Power Station + Ecological Restoration in LAS	Mr. Liu Kangfei (from China)	English
	10:30-10:45 (a.m.)	16:30-16:45 (p.m.)	Tea-break		
	10:45-11:45 (a.m.)	16:45-17:45 (p.m.)	No.2 Integrated Smart Energy: Background/Scenarios and Cases / Business Model	Mr. Liu Kangfei (from China)	English

Date	TIME SLOT		SUBJECTS	TRAINER	WORKING LANGUAGE
	Cairo Time	**Beijing Time**			
June 21, 2022	9:30-10:30 (a.m.)	15:30-16:30 (p.m.)	No.3. Photovoltaic Empirical Test Platform Research: Background and significance of the photovoltaic empirical test platform research	Miss Chodron (from Dubai)	English
	10:30-10:45 (a.m.)	16:30-16:45 (p.m.)	Tea-break		
	10:45-11:45 (a.m.)	16:45-17:45 (p.m.)	No.4 New Energy+ Energy Storage+(Hydrogen Production): Status Quo and Trend of Global Energy Development/China's Energy Transition Strategy /Application of New Energy + Energy Storage + Hydrogen / Business Model/Bottleneck of Development	Mr. Ren Wei (from China)	English