

全球环境基金（GEF）“中国新能源汽车和可再生能源综合
应用商业化推广” 第二次项目指导委员会
会议纪要

**Meeting Minutes: The Second Project Steering Committee
Meeting of the Global Environment Facility (GEF) for the
*Integrated Adoption of New Energy Vehicles in China***

2021 年 2 月 25 日, 全球环境基金（GEF）“中国新能源汽车和可再生能源综合应用商业化推广”项目指导委员会第二次会议在中国汽车工程学会召开。

On 25 February 2021, the Second Project Steering Committee Meeting of Global Environment Facility (GEF) for the *Integrated Adoption of New Energy Vehicles in China* was held at the China Society of Automotive Engineers (China SAE).

本次会议由中国汽车工程学会副秘书长王菊主持, 工业和信息化部装备工业一司汽车发展处三级调研员陈春梅、工业和信息化部国际合作司国际组织处刘力铭、联合国工业发展组织驻华代表处代表 Tonilyn LIM、联合国工业发展组织驻华代表处副代表马健、中国汽车工程学会副秘书长王菊, 以及来自上海、如皋、盐城、青岛四个示范城市的项目办公室代表出席了会议; 联合国工业发展组织高级项目主管 Katarina BARUNICA、东南大学黄学良教授、高山教授在线参

加会议。

The meeting was held by Wang Ju, Deputy Secretary-General of China SAE, and attended by Chen Chunmei, Deputy Division Director of Automotive Division of Equipment Industry Department of Ministry of Industry and Information Technology of the People's Republic of China, Liu Liming from International Organization Office of International Cooperation Department of Ministry of Industry and Information Technology of the People's Republic of China, Representative Tonilyn LIM of the United Nations Industrial Development Organization Regional Office in China, Deputy Representative Ma Jian of United Nations Industrial Development Organization Regional Office in China, Deputy Secretary-General Wang Ju of China Society of Automotive Engineers, and the representatives of Project Offices of four Demo Cities including Shanghai, Rugao, Yancheng and Qingdao; Katarina BARUNICA, (please fill in the department and position) United Nations Industrial Development Organization, Professor Huang Xueliang and Professor Gaoshan from Southeast University participated in the Meeting in an online way.

中国汽车工程学会王冀汇报了项目总体进展情况和第三年重点工作方案，上海、盐城、青岛示范项目办公室分别汇报了项目示范情况及进展，并进行了深入讨论。形成意见及建议如下：

Wang Ji, China Society of Automotive Engineers, reported the project's overall progress and the work plan for the third year, and

representatives from Shanghai, Yancheng and Qingdao Demonstration Project Offices reported their respective project demonstration status and progresses. The participants had an in-depth discussion of the existing issues and reached the following conclusions with recommendations:

1.项目实施总体进展情况顺利，按照设定的时间节点和任务要求完成了第一年和第二年的工作内容，项目第三年将继续按照任务及时间节点要求，按季度和年度制定时间表，执行工作，于 2021 年 12 月 31 日前完成所有工作任务。

1. The overall project progress and implementation has been smooth and the first and second years have been completed in accordance with the timeline and task requirements. In the third year, the project will continue to follow the timeline and task requirements on a quarterly and annual basis to complete all required work by December 31, 2021.

2. 原定于在盐城示范的大部分内容转移到青岛实施，具体如下：

(1) 项目文件中，原定于在盐城智能充电体系示范的建设或改造 1000 个智能充电桩服务于 1000 辆电动汽车，包括 700 辆卡车、50 辆出租车、10 辆公共汽车、100 辆乘用车和 140 辆私人或租赁乘用车等任务，转移到青岛实施。

具体实施内容:在青岛建成 1000 个具有电网协同功能的智能充电桩，并服务于不少于 1000 辆电动汽车，实现智能充电。

2. Most demonstration work previously assigned to Yancheng will be transferred to Qingdao for implementation, including:

(1) In the PIF, the task to build or upgrade 1,000 intelligent charging piles to serve 1,000 electric vehicles, including 700 trucks, 50 taxis, 10 buses, 100 passenger cars and 140 private or rented passenger vehicles, originally under the Yancheng Intelligent Charging System Demonstration Project will be transferred to Qingdao for implementation.

According to the above update, 1,000 intelligent charging piles equipped with power grid synergy will be built in Qingdao to serve at least 1,000 electric vehicles and realize intelligent charging.

(2) 项目文件中，原定于自盐城示范的用于服务照明和空调系统构成的楼宇建筑负载及电动车的充电系统的 1000KW 光储充放一体化可再生能源微电网等任务，转移到青岛实施。

具体实施内容:在青岛特锐德示范园区建成一套光伏装机容量 1000kWp、储能装机容量 300kWh 的光储充放一体化可再生能源微电网，服务不少于 80 辆电动汽车并完成电动汽车充放电、光伏发电和储能高度集成的一体化交直流混合组网系统开发。

(2) In the PIF, the task to build 1,000 KW Integrated Renewable Energy Micro-grids for Distributed Photovoltaic Power Generation, Energy Storage and Charge-Discharge for Architecture Load and Electric Vehicle Charging System as a part of the Yancheng Lighting and Air-conditioning System Demonstration Project will be transferred to Qingdao for implementation.

According to the above update, a set of Integrated Renewable Energy

Micro-grids for Distributed Photovoltaic Power Generation, Energy Storage and Charge-Discharge with 1,000 kWp photovoltaic capacity and 300 kWh energy storage capacity will be built in Qingdao TGood Demonstration Park, which will serve at least 80 electric vehicles and will be used for the development of AC and DC mixed networking system that highly integrates the charge-discharge, photovoltaic power generation and energy storage for electric vehicles.

(3) 项目文件中, 原定于在盐城建设示范 10 个 V2G 充电桩和 10 辆 V2G 汽车展示盐城的 V2G 体系等任务, 转移到青岛实施。

具体实施内容:在青岛建成不少于 10 台 V2G 充放电桩进行示范, 并服务于 10 辆具备 V2G 功能的电动汽车。

(3) In the PIF, the task to build a V2G System with ten V2G charging piles and ten V2G vehicles in Yancheng will be transferred to Qingdao for implementation.

According to the above update, at least ten V2G charging and discharging piles will be built in Qingdao to serve ten V2G-powered electric vehicles.

(4) 项目文件中, 原定在盐城运行 1 辆采用电池容量 1000kWh 退役电池组的移动充电车等任务, 转移到青岛实施。

实施内容:在青岛开发可进行 V2V 充电的可移动式车辆救援系统, 利用救援车辆自有电池组为被救援车辆供电; 在青岛地区投入不少于 3 台设备, 用于救援青岛由于电力不足而导致无法启动的电动汽车。

(4) In the PIF, the task to operate one mobile charging vehicle with 1,000 kWh retired battery packs in Yancheng will be transferred to Qingdao for implementation.

According to the above update, a mobile vehicle rescue system allowing V2V charging will be developed in Qingdao, and at least three systems will be put into use to rescue low-battery electric vehicles that cannot start normally.

3. 经过讨论, 考虑到盐城风电资源丰富, 具有独特的资源禀赋, 盐城维持原项目文件的示范内容如下:

3. After discussions, since Yancheng possesses rich solar and wind resources, the following demonstration projects will still be conducted in Yancheng according to previous schedule:

(1) 在盐城大丰金风科技有限公司示范园区进行风光储充微电网示范, 包括 2MW 的大型风力发电、100kWp 的光伏发电的微电网, 并产出《风电为主型风光储充微电网运行示范分析报告》。

(1) Wind Power Micro-grids for Distributed Photovoltaic Power Generation, Energy Storage and Charge-Discharge will still be developed in the Demonstration Park of Yancheng Dafeng Jinfeng Technology Co. Ltd. as a demonstration project – including the micro-grids of 2 MW large-scale wind power generation and 100 kWp photovoltaic power generation, and the *Analysis Report on the Demonstration Operation of Wind Power-dominated Mini-grids for Distributed Photovoltaic Power Generation*,

Energy Storage and Charge-Discharge will be released.

(2) 在盐城综合能源应用科技产业园建设 30kW 园区小型风力发电、1.2MWp 分布式屋顶光伏、80KWp 光伏幕墙、200kW/800kWh 预制仓储能、100 个充电桩（交流充电桩 90 个、一体式直流充电桩 10 个、具备 V2G 功能充电桩 2 个），地源热泵（设计空调冷负荷 3000kW，空调热负荷 1500kW），并产出《盐城综合能源应用科技产业园综合能源微电网系统接入方案》、《综合能源微电网运行示范分析报告》。

(2) A 30 kW Small Wind Power Generation Plant, 1.2 MWp Distributed Roof-based Photovoltaic Power Generation System, 80 KWp Photovoltaic Curtain Wall, 200 kW/800 kWh Prefabricated Energy Storage System, 100 Charging Piles (90 AC charging piles, 10 integrated DC charging piles and 2 V2G charging piles) and ground source heat pump (designed with 3,000 kW air-conditioning cooling load and 1,500 kW air-conditioning heating load) will be built in Yancheng Integrated Energy Application Science and Technology Park, and reports such as “Integrated Energy Mini-grids System Access Scheme of Yancheng Integrated Energy Application Science” and “Technology Park and the Analysis Report on the Demonstration Operation of Integrated Energy Mini-grids” will be completed.

(3) 编写《风光储微电网新能源汽车和可再生能源融合发展技术策略研究报告》，包含微电网新能源汽车和可再生能源融合发展策

略、风光储微电网建设和运营指导原则及合理化建议。

以上项目，由东南大学承担实施。

(3) *The Research Report on Strategies for Integrated Development Technologies of New Energy Vehicles and Renewable Energies Powered by Wind Power Micro-grids for Distributed Photovoltaic Power Generation and Energy Storage* will be compiled, which will include the integrated development strategies of new energy vehicles and renewable energies powered by micro-grids, with guiding principles and suggestions on the construction and operation of wind power mini-grids for distributed photovoltaic power generation and energy storage.

The above project will be undertaken and implemented by Southeast University.

4. 中国汽车工程学会与联合国工业发展组织合作，联合编写中英文版本的《新能源汽车与可再生能源融合技术指南》(暂定名)，研究总结我国示范城市建设运营的经验，制定城市级的技术示范指南和应用指南，形成具有可复制的、具备可操作性的出版物。

《新能源汽车与可再生能源融合技术指南》的编写工作预留预算，由中方项目办公室负责执行；在编制过程希望 UNIDO 参与指导，并在 UNIDO 网站和其他国际渠道发布。

4. China SAE and UNIDO will jointly develop *The Technical Guide for the Integrated Development of New Energy Vehicles and Renewable*

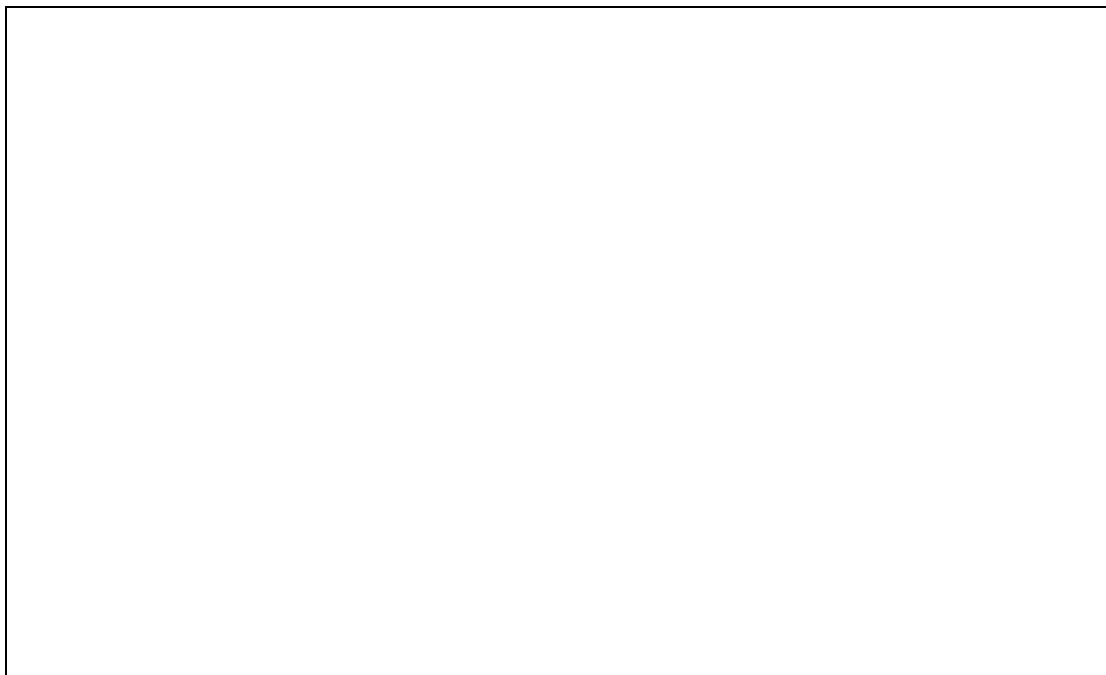
Energies (tentative name, Chinese & English versions). The guidelines will analyze and summarize the experiences and best practices gained from China's integrated EV-RE demonstration and develop city-level technical demonstration and application guidelines that could be replicated for implementation in other cities and regions.

A budget has been reserved for the above guidelines writing, which will be implemented by the Chinese Project Office. UNIDO is expected to provide guidance for the guidelines development and publish it at the UNIDO website and other international channels.

5.考虑到项目中大部分活动结题时间为 2021 年 12 月份，为确保第三方机构进行最终评估时能够全面了解项目情况，高质量完成项目总结，UNIDO 同意于 2022 年 1 月 1 日开始组织进行项目终期评估，计划在 3 月 15 日结束。

5. Most program tasks and activities will be completed in December 2021, therefore in order to ensure that the third-party institution could have a comprehensive understanding of the program in the final assessment and complete high-quality program summarization, UNIDO agrees to conduct the final assessment from January 1, 2022 and complete it on March 15, 2022.

签字栏/Signature

A large, empty rectangular box with a thin black border, intended for a signature.

参会人员:

陈春梅 工业和信息化部装备工业一司汽车发展处副处长

刘力铭 工业和信息化部国际合作司国际组织处

Tonilyn LIM 联合国工业发展组织驻华代表处代表

马 健 联合国工业发展组织驻华代表处副代表

Katarina BARUNICA (请填写部门和职位) 联合国工业发展组织

王 菊 中国汽车工程学会 副秘书长

韩雅娟 中国国际工程咨询有限公司高技术业务部处长

潘晓红 上海（国际）汽车城集团有限公司总经理

管清平 上海（国际）汽车城集团有限公司党委委员

李成蹊 上海（国际）汽车城集团有限公司新能源事业部副经理

黄学良 东南大学教授

高 山 东南大学教授

谭志海 东南大学教师

徐宏建 如皋市经济技术开发区新能源汽车园区副主任

王 冰 青岛特来电新能源有限公司技术研究院副总经理

王 冀 中国汽车工程学会

张会来 中国汽车工程学会

李天稳 中国汽车工程学会

李 可 中国汽车工程学会

Participants:

Ms. Chen Chunmei, Deputy Division Director of Automotive Division of Equipment Industry Department of Ministry of Industry and Information Technology of the people's Republic of China

Liu Liming, International Organization Office of International Cooperation Department of Ministry of Industry and Information Technology of the People's Republic of China

Ms. Tonilyn LIM, Representative of the UNIDO in China

Mr. Ma Jian, Deputy Representative of the UNIDO in China

Ms. Katarina BARUNICA, (please fill in the department and position)
UNIDO

Ms. Wang Ju, Deputy Secretary-General of China SAE

Ms. Han Yajuan, Director of CIECC

Ms. Pan Xiaohong, General Manager, SIAC Group Co., Ltd

Ms. Guan Qingping, Assistant General Manager, SIAC Group Co., Ltd

Ms. Li Chengxi, Deputy Director, New Energy Department, SIAC Group Co., Ltd

Mr. Huang Xueliang, Professor of Southeast University

Mr. Gao Shan, Professor of Southeast University

Mr. Tan Zhihai, Teacher of Southeast University

Mr. Xu Jianhong, Deputy Director of New Energy Vehicle Park, Rugao Economic and Technological Development Zone

Mr. Wang Bing, Deputy General Manager of Technology Research
Institute of Qingdao TELD New Energy Co., Ltd.

Mr. Wang Ji, China SAE

Mr. Zhang Huilai, China SAE

Mr. Li Tianwen, China SAE

Ms. Li Ke, China SAE