

# 新奥能源研究院

## ENN Energy Research Institute

### 一、研究院简介

### Introduction

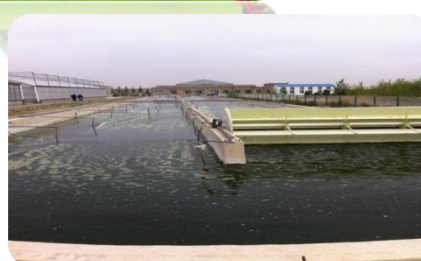
面对传统能源利用高耗低效、污染严重等问题，我国的能源生产、输配和使用方式亟待变革。新奥集团致力于清洁能源技术创新与产业化实践，依托泛能网技术，推动现代能源体系建设，通过化石能源与可再生能源融合、集中式与分布式互补、供需双向互动、能源全生命周期管理和优化，转变能源的生产和利用方式，实现区域能源的“安全、稳定、经济、清洁”利用，助力生态城市建设及节能环保产业发展。

As traditional energy generation and utilization are posing tremendous challenges to our environment, it is urgent and important to upgrade and transform the way we generate, distribute and use energy. ENN is committed to the innovation and commercialization of clean energy, and building a modern energy system based on Ubiquitous Energy Internet (UEI) technology. By integrating the renewable and fossil energy, distributed and centralized energy generation, providing a high level responsiveness to demand, we are making changes to energy production and utilization. Secure, stable, economical, and clean regional energy system is realized through life cycle energy management. We have endeavored to promote environmental protection and energy saving as well as the development of eco-cities.



新奥能源研究院自 2007 年成立以来，一贯秉承“求真务实、引领突破”的实干精神，坚持自主创新，不断取得重要突破。在煤基低碳能源技术方面，涉及煤的催化气化、加氢气化、地下气化和超临界气化技术；可再生能源技术方面，涉及微藻生物固碳多联产技术和太阳能高效转化技术；环保技术方面包括污泥超临界处理技术和污水处理技术；泛能网核心产品开发方面包括泛能机、泛能云和泛能能效平台等。以上多项技术成果达到了国际领先水平，部分技术已进入产业化示范阶段。

Established in 2007, ENN Energy Research Institute keeps making breakthroughs by indigenous innovation, following the motto of "Creating and Powering a Cleaner Future Together". For coal-based low-carbon technology, our research encompasses catalytic coal gasification, coal hydro-gasification, underground coal gasification and supercritical water gasification. In regards to renewable energy, the research involves micro-algal carbon fixation and poly-generation, and high efficiency solar energy conversion technology. For environmental protection, we focus on supercritical water based sludge treatment and sewage treatment. In terms of UEI products, we have developed ubiquitous energy units, ubiquitous energy cloud, and ubiquitous energy efficiency platform. Progress is made in many of these areas with some already in commercial demonstration stage.



新奥能源研究院拥有一支涵盖基础研究、应用研究和产品开发的国际化科研团队和工程技术团队；具有“煤基低碳能源国家重点实验室”、“博士后科研工作站”、“国家高层次海外人才创新创业基地”、“国际科技合作基地”等国家级平台；建有大型产业化示范基地；承担了国家 973 计划、863 计划、国家科技支撑项目、国际科技合作项目等三十余项；累计申请专利九百余项。本院还积极与国内外一流院校、科研机构和企业开展广泛的技术合作，共同推动清洁能源和节能环保技术的进步。



ENN Energy Research Institute has an international research and engineering team covering basic research, applied research and product development. There are national platforms such as the "State Key Laboratory of Coal-based Low Carbon Energy", "Post-doctoral Research Work Station", "Overseas High-level Talents Innovation and Incubation Base" and "International Scientific and Technological Collaboration Base". We have established large demonstration bases for industrialization and have undertaken over 30 projects in the National "973 Program", "863 Program", National Key Technology Research & Development Program, and International Science & Technology Cooperation Program. More than 900 patents have been filed thus far. We have also carried out extensive collaborations with domestic and overseas universities, research institutes and enterprises, to promote the development of technologies for clean energy, environment protection and energy conservation.