### PVPMC 会议及同期活动行程安排 Arrangement of PVPMC

## 1、会议行程安排

# **Schedule of the Forum**

12 月 3 日 December 3rd 会议注册 Conference Registration

时间	行程安排		
Time	Arrangement		
13:00-22:00	会议注册		
	<b>Conference Registration</b>		

## 12 月 4-5 日 December 4<sup>th</sup> - 5<sup>th</sup> 研讨会 PVPMC forum

时间	行程安排	
Time	Arrangement	
Dec.4th	酒店>>>>哈工大会场	
8:00-8:20	Hotel to HIT Weihai	
Dec.4th	研讨会	
8:30-12:30	Forum	
Dec.4th	会议午餐	
12:30-13:30	Lunch Time	
Dec.4th	研讨会	
13:30-18:00	Forum	
Dec.4th	欢迎晚宴	
18:30-20:00	Dinner	
Dec.5th	研讨会	
8:30-12:00	Forum	
12:00-13:00	午餐&活动结束	
	Lunch&End of forum	

## 2、光伏企业参观访问行程

# Visit arrangement to PV enterprises

# 12月5日

December 5<sup>th</sup> 行程安排

## Schedule

时间	行程安排	
Time	Arrangement	
12:10-13:00	哈工大>>>>威海高铁站	
	HIT Weihai to Weihai Railway Station	
13:43-19:15	威海>>>>徐州	
	Weihai to Xuzhou	
19:20-19:40	入住酒店,酒店自助餐,休息	
	To the hotel, check in and buffet inside hotel	

# 12月6日

December 6<sup>th</sup>

# 参观访问: 江苏日托光伏科技股份有限公司和未来能源馆

### Visit SUNPORTPOWER and Future energy exhibition hall

时间	行程安排 Arrangement	
Time		
Before 8:00	退房 Check out	
8:00-9:00	酒店>>>>日托邳州工厂	
	Hotel>>>>Sunportpower	
9:00-10:00	参观工厂&技术交流	
	Visit factory	
10:00-10:40	技术交流	
	Exchanging and discussing technology and skills	
11:00-12:00	午餐	
	Lunch	
12:00-13:00	到徐州高铁站	
	To Xuzhou railway station	
13:30-15:30	徐州>>>>苏州	
	Xuzhou to Suzhou	
16:30-18:00	未来能源馆	
	Visit Future energy exhibition hall	
18:20-19:30	交流晚餐	
	Dinner inside GCL	
19:40	入住酒店	
	Check in	

### 12月7日

## **December 7<sup>th</sup>** 参观访问:协鑫组件工厂和安轩自动化

#### Visit GCL solar module plant and ANX Automation

时间	行程安排	备注
Time	Arrangement	Remarks
8:30-9:30	酒店>>>>张家港	赴协鑫集成工厂
	Hotel>>>>Zhangjiagang	Go to GCL Zhangjiagang
9:30-10:30	参观工厂	
	Visit factory	
10:30-11:10	技术交流	
	Exchanging technology and skills	
11:10-12:30	午餐	协鑫餐厅
	Lunch	GCL canteen
12:30	结束交流	
	Finished Visiting	
12:30-13:30	张家港>>>>无锡	赴安轩自动化
	Zhangjiagang>>>>Wuxi	Go to ANX Automation
13:30-14:30	参观工厂 Visit factory	
14:30-15:10	技术交流	
	Exchanging technology and skills	
15:10-16:00	无锡>>>>苏州酒店	
	Wuxi>>>>Suzhou Hotel	
16:00	结束参观行程 End of visiting	

# 3、旅游安排

## **Tour Arrangement**

12 月 8 日 December 8<sup>th</sup> 苏州当地旅游

#### Local tour in Suzhou

时间	行程安排	备注
Time	Arrangement	Remarks
8:00	退房 Check out	
8:30-11:30	苏州当地景点	
	Local sites visiting in Suzhou	
14:00-17:00	当地购物或送至上海自由购物	
	Local shopping or free shopping in Shanghai	

备注: 上述行程涉及车票、住宿费、餐费已经含在相应套票内。

Note: All the railway tickets, hotel expense and meal fees has been included in related PVPMC TICKET PACKAGE.

#### 参观详细介绍

### ■ 无锡安轩科技 Anx Automation

无锡安轩自动化科技有限公司系上海安轩自动化科技有限公司全资子公司。公司占地面积 1700 平方米。 主要从事光伏智能运维机器人的生产及销售。 安轩科技自主研发的 iSUN 系列光伏智能运维机器人应用 已超过 1GW 光伏电站,产品远销至印度、伊朗、法国和意大利等国家。iSUN 系统机器人采用多项创新 技术,首次实现了光伏组件间前后、高低跨越,长距离跨串、平单轴同步角度误差跨越清洗工作,同步实 现光伏组件检测工作,极大程度的提高光伏电站的发电效率及管理水平,帮助广大业主和客户提质增效、 降低运维成本,保障电站安全、稳定、高效运行,实现光伏电站的保值增值。

Wuxi Anx Automation Technology Co., Ltd. is a wholly-owned subsidiary of Shanghai Anx Automation Technology Co., Ltd. The company covers an area of 1,700 square meters, Mainly engaged in the production and sales of PV intelligent O&M robots. Its self-developed PV panel O&M robots have been highly praised by worldwide customers and applied to PV power plants of more than 1GW. These products are sold domestically and overseas to countries such as India, Iran, France, Italy, etc. A number of patented technologies have been applied in the iSUN series PV smart O&M robots independently developed by Anx Technology, realizing the cleaning work of front and back, high and low leap, long-distance cross-string, flat uniaxial synchronous angle errors across PV panels and inspection of the PV panels for the first time., greatly improve the power generation and management level of PV power stations, help the PV power station owners and customers improve quality and efficiency, reduce operation and maintenance costs, ensure safe, stable and efficient operation of power stations, and realize the preservation and appreciation of PV power plants.

上海安轩自动化科技有限公司是一家集研发、制造、组装、销售、服务于一体的创新型高新技术企业。是 东旭蓝天(股票代码:000040)投资入股的能源科技创新技术企业。主要有机器人研发、智慧能源产品 和智慧运维服务三大业务版块。

Shanghai Anx Automation Technology Co., Ltd. is an innovative high-tech enterprise invested by Tunghsu Azure Renewable Energy Co., Ltd (stock code: 000040) , integrating R&D, manufacturing, assembly, sales and service. Its primary business is in R&D of robots, smart energy products and efficient O&M service.





### ■ 协鑫集成张家港智能制造基地

### GCL System Zhangjiagang Intelligent Manufacturing Base

协鑫集成科技有限公司张家港工厂建立于2015年1月,是一家专业生产太阳能光伏组件产品的单位,致 力于为国内外一流太阳能光伏企业提供优质光伏组件产品,张家港协鑫集成已成为全球单体规模最大,产 线兼容性最强的太阳能组件生产基地。

GCL System Integration Technology Co. Ltd. Zhangjiagang Plant established in January 2015 is a professional production of solar photovoltaic modules units, which is committed to providing high quality photovoltaic products for top class solar PV enterprises at home and abroad. GCL System (Zhangjiagang) has become the world's largest monomer scale solar module production base with the strongest production line compatibility.

协鑫集成智能制造项目采用国内最先进的全自动生产设备和生产管理系统,具备生产常规 60P、72P、96P 组件&双玻 72P、双玻双面、金刚系列等特种新产品组件的能力。最终要实现效率提升 50%,在线人力减少 60%,加工成本降低 30%,交期缩短 30%,质量良率提升 21%。

GCL System integrated intelligent manufacturing project adopts the most advanced automatic production equipment and production management system, being capable of producing conventional 60P, 72P, 96P components & special new product components such as double glass 72P, double glass double-sided, King Kong series. Eventually, the efficiency will be increased by 50%, online manpower decreased by 60%, processing cost reduced by 30%, delivery time shortened by 30%, and quality yield raised by 21%.

协鑫集成智能制造工厂重点围绕打造全自动、无人化、集中控制的"黑灯工厂"智能车间,实现由"人脑 分析判断+机器生产制造"向"机器分析判断+机器生产制造"转变。

GCL System integrated intelligent manufacturing plant focused on building a fully automatic, unmanned and centrally controlled "black light factory" intelligent workshop, so as to realize the transformation from "human brain analysis judgment + machine manufacturing" to "machine analysis judgment + machine manufacturing".

智能示范车间采用自主研究开发的数字化物联网信息集成管理系统 GBCS 系统与产品唯一 ID 集成管理系统,真正意义上实现产品的品质实时追溯可查找,配合 GBCS 模块化监控系统、手机 APP,实现互联网+功能,可实现在线远程监控和程序辅助修改,客户可以实时查看产品的每一个生产环节,使产品与客户零距离,从传统的手工制造到机械化的流水线作业,向订单"7 天交付的全流程可视的智能制造云管理平台"跨越。

Intelligent demonstration workshop adopts developed independently digital IOT information

integrated management system - GBCS system integrated management system with product unique ID, which achieves real-time traceability of product quality in a real sense, with the support of GBCS modular monitoring system and mobile APP, realizing Internet + function. It enables online remote monitoring and program-assisted modification, so customers can view every step of production in real time that eliminating the distance between customers and products. From traditional manual manufacturing to the mechanized production line work, the system is spanning to the order "7-day delivery of the entire process visible intelligent manufacturing cloud management platform".





### ■ "未来能源馆" GCL "Future Energy Hall"

国内首座"未来能源馆"位于协鑫苏州能源中心,展厅面积 4300 平米,全方位展示全球能源变革足迹, 让来宾体验能源科技改变人与自然的和谐共生之美。

The first "future energy hall" in China is located in GCL Suzhou Energy Center. The exhibition hall covers an area of 4,300 square meters, which comprehensively presents the global energy reform footprint, and bringing guests the experience of the beauty of energy technology changing the harmonious coexistence between human and nature.

协鑫"未来能源馆"采用先进的展示技术和手段,打造能源行业同类展馆中首家集多种最新能源科技为一体,同时以来宾体验为中心的能源科技展馆。展示主线为能源观念与技术的变革,支撑人类文明永续发展,与大众创能、万众创绿的未来能源新生活相结合。

GCL "future energy hall" adopt advanced display technology and means, building the first guest experience centered energy technology exhibition hall in the industry that integrates various latest energy technologies. The main theme is the transformation of energy concepts and technologies, supporting the sustainable development of human civilization, and integrating with the concept of mass energy conservation and environmental protection in future energy new life.

协鑫"未来能源馆"分为三个部分:一厅主题为能源革命驱动文明进步,通过宏观纵览历次能源变革,直面能源与自然、能源与人类文明的关系,了解能源变化带来的科技进步、社会文明提升及巨大的世界新挑战;二厅主题为绿色新能源可持续发展,从世界能源格局切入,展示能源科技创新对推动第三次能源革命的"科技驱动力",同时展示中国在这一重大历史进程中的实践与创新;三厅主题为把绿色能源带进生活,该展厅以未来能源生活为蓝本,营造一座可沉浸体验的智慧能源之城,透过社区、家庭等五大板块,让人深切感受随着能源变革人类文明即将产生的巨大飞跃。

GCL "future energy hall" is divided into three parts: the theme of Hall 1 is energy revolution driving civilization progress, facing up to the relationship between energy and nature, energy and human civilization through a macro overview of energy change, understanding the technological advances that come with energy change, and social civilization and great new world challenges; the Hall 2 shows the topic of sustainable development of green new energy, from the prospective of world energy pattern, demonstrating the "technological driving force" of energy technology innovation for the third energy revolution, at the same time, demonstrating China's practice and innovation in this major historical process; the theme of Hall 3 is to bring green energy to life, the created smart energy city with immersive experience, which takes the future energy life as the model to build community, family and other five sectors, so that we can deeply feel the huge leap forward of human civilization as energy changes.

作为中国首座由企业自主创意、策展的全息式、交互式综合能源展示场馆,协鑫"未来能源馆"在场馆建设、策展与布展等方面一直以国际标准和"协鑫速度"不断刷新多个方面的记录。

As China's first holographic, interactive and comprehensive energy exhibition hall independently created and planed by the enterprise, GCL "future energy hall" keeps a record of multiple aspects in construction of halls, exhibition planning and arrangement with its international standard and "GCL speed".





■ 日托光伏 Sunport Power Corp., Ltd.

日托光伏是一家专注于高端光伏电池及组件研发、制造销售和服务的国家重点高新技术企业。由国际知名 太阳能专家、南京大学教授、博士生导师张凤鸣领导的博士团队于 2012 年在南京创建。

公司开发了具有完全自主知识产权的新一代高效 MWT 背接触电池和组件技术, 六年内拥有专利 100 余项, 是目前全球光伏行业内唯一实现该技术产品专业化产业化并达到 GW 级产能的企业。产品性能处于行业领 先水平, 广泛应用于国内外光伏电站和分布式发电项目。

日托光伏与众多的国内外研究机构、高等院校及产业链上下游企业紧密合作,致力于持续不断地技术创新、 不断推动行业健康发展。

Sunport Power Corp., Ltd. is dedicated to R&D, manufacturing, sales and services for solar cells and modules of high efficiency and reliable performance. Sunport Power is founded in 2012 by Dr. Fengming Zhang and his doctoral team, the professor and doctoral supervisor at Nanjing University.

Sunport Power has successfully developed MWT-technology-based high efficient solar cells and modules. It's the new generation solar modules with more than 100 patents. Hence Sunport Power is the one&only manufacturer capable of producing MWT modules on massive scale all over the world. The excellent performance of MWT modules has been recognized and widely used in the domestic and overseas solar farms and DG projects.

Having collaborated with domestic and foreign research institutions, universities and up and down stream enterprises, Sunport Power has committed to continuous technology innovation and enhancement of healthy development of PV industry.