



VIDEO TRANSLATION

DCA: Welcome to everyone tuning in - To assist in the transfer of knowledge we will conducting a series of video interviews with partners of the Marie Curie European Exchange Project No 734340 Dew-Cool-4-CDC. Today I am pleased to be joined by Mr Xiangwu Ding, from Shanxi Sinogreen Environment protection Ltd. Hello Mr Ding.

Mr Ding: Hello.

DCA: To help those watching could you first tell me a little bit about Shanxi Sinogreen Environment protection and your daily responsibilities within the organisation?

Mr Ding: SINO is a company specializing in equipment, platform, software and other energy-saving equipment for online environmental monitoring. I am mainly responsible for managing technological projects in the organisation, improving the research abilities of company, studying government policies on science relations, and auditing/reviewing technical documents.

DCA: Can you tell me about your involvement in this Marie Curie European Exchange Project?

Mr Ding: Our involvements are mostly achieved in cooperation with the University of Hull. I don't think we have participated in it fully, because it is a European Exchange Project and mainly focused on Europe. We have a team in China based on this cooperation relationship.

DCA: What are the principal goals and objectives of this project from your perspective?

Mr Ding: We were introduced in this project because of the earlier stage cooperation with University of Hull. The principle goals to participate in this project are mostly about communication and cooperation, including cultivating skills, and the development & application of new technology. For developing and applying new technology, we have carried out research and produced work on DPC prior to by collaborating with the University of Hull, since our nation is more advanced in manufacturing industry. Communication & cooperation is vital aspect and we have gained experience by exchanging ideas with EU project members.

DCA: Specifically what work packages and deliverables are you as an organisation responsible for?

Mr Ding: We are mostly focused on work package 2 – requiring more than 15 people to participate in, and more than 12 for exchange. In work package 2, we worked on researching and producing DPC in data centre. As our nation is advanced in the manufacturing sector, we also cooperated with Tsinghua University, they were responsible for initial design, and we were focus on detailed implementation. We have also completed a 2000 kW model machine which also performed well in testing.

DCA: Next we'll ask some technical questions. Can you introduce to our audience to the fan/pump systems that was developed or used in this project for the specialist DPC system?

Mr Ding: Initially we chose the fan system from a UK agent named EPM PAPST. However, for this project, we've chosen the fan system from our domestic agents. After the application, we found that the capacity of the selected fan system at 2000 kW is a bit too high, since the airflow of the fan is 705 m³/h while the best airflow rate should be around 240 m³/h according to tests. We chose to select the fan system at an airflow rate. Related to the water pump, the water consumption of this model machine system is very small, so we selected the water pump at a low power which fulfils the requirements of energy saving when designing.

DCA: Can you tell us more about SINO's work in the development of this technology and why does this technology important to the whole system?

Mr Ding: We were responsible for work package 2, including the produce of heat exchanger, the study of development process, coordinated tests on operation, control, design and application. Initially we were mostly focused on the completion of equipment like solving problems around seals, ventilation, or drainage. We worked with TUT for control systems for controlling the operation of water and fans. TUT has developed a system but we think it is too complex. With intellectual property in mind, we also put some efforts into researching the operation controls and applications by ourselves. We were able to prove the performance of our work. We have developed a relatively simple system performing well in controlling the heat exchanger system. As for this system, it has characteristics at low energy consumption with COP at around 40. We think it fits the current concerning concepts about low carbon.

DCA: Finally, can I ask you to summarise why it was so important for Shanxi Sinogreen Environment protection to participate in this project and highlight the value of what it has and or will deliver?

Mr Ding: For our company, participating in this project is very meaningful, it enhances communication, technical innovation, and business expansion. It also helps to improve the ability of our platform, since our company is a platform based on international cooperation. Through the cooperation in this project, is also promotes the base construction. Especially from 2020, Ministry of Science has been interested in the base construction. As for its values, we think it can be divided in three points. Firstly, it can improve our technical ability through the high-level communication, as it is expanded to EU where there is high level technology. It broadens the horizon; SINO is limited in visions as an inland private enterprise. Lastly, it has helped us to master a technique of high efficiency DPC, and we can share it with other peers in the industry, this includes implementation and sharing issues.

DCA: That great Mr Ding, that just about leaves me enough time to thank Mr Ding, from Shanxi Sinogreen Environment protection for taking the time today to explain a little more about the Marie Curie European Exchange Project and the valuable contribution it has made to the research and development of the Dew Point Cooler technology. This interview will be available to view on the project website shortly, where you will also find interviews with all the partners involved in this project. Thank you.