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Water Platform

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Water and Energy Security

Priority Areas for Cooperation between EU and China



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01

Role of hydropower and its importance in the clean energy transition

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Priority Areas for Cooperation between EU and China

- To better understand and optimize the balancing role of hydropower for accelerating clean energy transition, securing grid stability and avoiding variable renewables curtailment.

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| Link with MLP key area | Energy; Environment; Water and Mineral Resources |
| Link with Horizon Europe intervention area | Cluster 6: IA4-Seas,oceans and inland waters,IA7-Circular systems Cluster 5: IA2-Energy supply Cluster 4: IA9-Circular industries,IA10-Low-carbon and clean industries |

02

Improving the performance and applicability of small hydropower systems

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Priority Areas for Cooperation between EU and China

- **Research on upgrading the performance of small hydropower systems that could be applied in a wide range of environments, including rural and urban applications.**
- **Planning and assessment of greening and upgrading of small hydropower**
- **Improved efficiency while ensuring ecosystem restoration and environmental improvement.**

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| Link with MLP key area | Energy; Environment; Water and Mineral Resources |
| Link with Horizon Europe intervention area | Cluster 6: IA4-Seas,oceans and inland waters, IA7-Circular systems Cluster 5: IA2-Energy supply Cluster 4: IA9-Circular industries, IA10-Low-carbon and clean industries |

03

Sustainable development under water-food-energy-ecosystem nexus in selected key river basins

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Priority Areas for Cooperation between EU and China

- **China-EU exchange on experiences, policies, and technologies related to Water-Food-Energy-Ecosystem nexus in selected key river basins.**
- **Assessment of current status of the Water-Food-Energy-Ecosystem nexus system in selected key river basins.**
- **Support development of more coordinated planning and management of the demand and supply of water, energy, food and essential ecosystem services in selected key trans-provincial rivers, such as the yellow river in China.**

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| Link with MLP key area | Energy; Environment; Agriculture; Water and Mineral Resources |
| Link with Horizon Europe intervention area | Cluster 6: IA3-Agriculture,forestry and rural areas, IA4-Seas,oceans and inland waters, IA5-Food systems, IA6-Bio-based innovation systems, IA7-Circular systems Cluster 5: IA1-Climate,energy and mobility, IA2-Energy supply |

04

Assessment and management of effects of hydropower on coastal ecosystems from a Source-to-Sea perspective

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Priority Areas for Cooperation between EU and China

- **Development of knowledge to better understand, assess and manage the effects of hydropower on coastal ecosystem**

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| Link with MLP key area | Environment; Energy; Water and Mineral Resources |
| Link with Horizon Europe intervention area | Cluster 6: IA4-Seas,oceans and inland waters,IA7-Circular systems Cluster 5: IA2-Energy supply Cluster 4: IA9-Circular industries,IA10-Low-carbon and clean industries |

05

Innovative renewable energy supported irrigation systems

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Priority Areas for Cooperation between EU and China

- **A research area actively pursued by China with an interest in multi-water source irrigation systems as seen by identified research projects.**
- **China-EU exchange on renewable energy supported irrigation systems.**
- **Review of latest applications of renewable energy supported irrigation systems in EU and China.**
- **Support further development of such irrigation systems in EU and China.**

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| Link with MLP key area | Energy; Environment; Agriculture |
| Link with Horizon Europe intervention area | Cluster 6: IA4-Seas,oceans and inland waters, IA3-Agriculture,forestry and rural areas, IA5-Food systems, IA7-Circular systems Cluster 5: IA1-Climate,energy and mobility, IA2-Energy supply Cluster 4: IA9-Circular industries, IA10-Low-carbon and clean industries |

Thank you!



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