Record Nr. UNINA9910725928603321 Autore Wang Shuren Titolo Proceedings of the 2nd International Conference on Innovative Solutions in Hydropower Engineering and Civil Engineering [[electronic resource] /] / edited by Shuren Wang, Jingan Li, Kui Hu, Xingxian Bao Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2023 Pubbl/distr/stampa **ISBN** 981-9917-48-4 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (519 pages) Collana Lecture Notes in Civil Engineering, , 2366-2565 ; ; 235 Altri autori (Persone) LiJingan HuKui BaoXingxian Disciplina 621.312134 Soggetti Water-power Civil engineering Hydroenergy Civil Engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Hydropower and sustainable development -- Maximizing and communicating the multiple benefits of hydro -- The food-waterenergy nexus approach -- Synergy among the renewables -- Making hydro more competitive (managing and mitigating risk) -- Regional development through power trading -- Hydropower technology -- Civil engineering -- Materials for dams and appurtenant works -- Advances in design and construction techniques -- Recent developments in dam construction -- Monitoring and engineering for safe structures and sites. Sommario/riassunto This open access book is compilation of selected papers from 2nd International Conference on Innovative Solutions in Hydropower Engineering and Civil Engineering (HECE 2022). The work focuses on novel techniques for topics in hydropower and sustainable development, maximizing and communicating the multiple benefits of hydro, the food-water-energy nexus approach, synergy among the renewables, making hydro more competitive (managing and mitigating

risk), regional development through power trading, hydropower

technology, civil engineering, materials for dams and appurtenant works, advances in design and construction techniques, recent developments in dam construction, monitoring and engineering for safe structures and sites. Hydropower offers significant potential for carbon emissions reductions. The installed capacity of hydropower by the end of 2008 contributed 16% of worldwide electricity supply, and hydropower remains the largest source of renewable energy in the electricity sector. The contents make valuable contributions to academic researchers, engineers in the industry, and regulators of hydropower and civil engineering authorities.