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100 key questions to guide hydropowering research

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Hydropowering has received increasing attention in the last years, but many knowledge gaps remain, potentially hampering effective policy and management efforts in rivers under such type of hydropower production. In this study, we collected open hydropowering research questions from over 200 experts in river science, practice, and policy across the globe using an online survey available in five languages. We used a systematic method of determining expert consensus (Delphi method) to identify 100 core questions related to the following thematic fields: (i) hydrology, (ii) physico-chemical properties of water, (iii) river morphology and sedimentology, (iv) ecology and biology, (v) socio-economics and energy markets, (vi) policy and regulation, as well as (vii) management and mitigation measures. The consensus list of questions shall inform and guide researchers in focusing their efforts to foster a better science-policy interface, thereby improving

the sustainability of peak-operating hydropower in a variety of settings.