# **Transition Town Kingston - Energy Group**

Monday 19th February 2024

## **Environment Agency. River Thames Scheme - Statutory Consultation**

Dear Sir / Madam,

I write to you on behalf of the Transition Town Kingston - Energy Group (TTK-EG). TTK is part of a nation-wide network of community interest organisations working collaboratively to build resilient local communities. Our work involves raising awareness of the climate crisis and supporting practical actions to assist the transition to a more resilient and sustainable low-carbon future.

TTK-EG responded to the River Thames Scheme (RTS) public consultation that took place between November- December 2022 through a written submission dated 19 December 2022 (attached with this response). The submission requested consideration be given to the installation of hydropower generation elements within the proposed infrastructure upgrades to the Teddington, Molesey and Sunbury weirs. The lower Thames weirs are the largest on the river Thames and are ideal locations for implementing small-scale hydropower generating elements.

The TTK-EG submission to the public consultation was formally acknowledged by the Environment Agency and documented within the RTS Second Consultation Summary Report June 2023. However, from the consultation documentation provided, including the "*Matters raised*" report dated January 2024, we could not find any reference and/or formal response to the request for hydropower to be considered within the RTS scheme.

Accordingly, through this written submission, together with participation at the recent consultation event in Kingston upon Thames, I would like to resubmit the suggested implementing of hydropower solutions to the RTS statutory consultation process January - March 2024. As representatives of the local community supporting local actions to advance sustainability and resilience, for the reasons outlined below, we believe the installation of hydropower would make a significant contribution to the achievement of the RTS vision, goals and aspirations as highlighted in the relevant RTS documentation:

**River Thames Scheme Vision:** The River Thames Scheme will reduce flood risk to people living and working near the Thames, enhance the resilience of nationally important infrastructure, contribute to a vibrant local economy and maximise the social and environmental value of the river.

#### **RTS Goals:**

- 1. Reduce the risk of flooding to homes, businesses and infrastructure
- 2. Improve access to quality green open space, connection with wildlife and sustainable travel network
- 3. Create a network of high-quality habitat and achieve biodiversity net gain
- 4. Facilitate sustainable and inclusive economic growth
- 5. Enable delivery and design that contribute to carbon-reduction goals set by the EA, SCC and partners

#### **National Aspirations:**

In alignment with government objectives, the RTS addresses the impacts of climate change, focusing on increasing resilience to floods and coastal erosion.

### **Local Ambitions:**

Locally, the scheme contributes to reducing flood risks and fostering environments that nurture both people and wildlife. It promotes health well-being, and climate resilience while also bolstering natural habitats and biodiversity. Making sure goals meet national and local needs, the RTS is a forward-thinking response to climate change, community needs, and economic development.

The incorporation of hydropower solutions within the existing weir structures would deliver many benefits to the local communities, including the following contributions to the overall effectiveness of the RTS:

**First;** the RTS is intended to be an *integrated scheme* that enables local communities to adapt to the increasing risk of flooding due to climate change. Although primarily a climate adaptation project, a fully integrated scheme has the potential to address both *climate adaptation* and

**climate mitigation** challenges. Incorporating hydropower solutions within the enhanced weir structures, as an integral component of the wider flood protection scheme, would enable the RTS to reduce local carbon emissions, further contributing to national and local carbon reduction goals set by the Environment Agency, SCC and partners **(RTS Goal 5)**. The Teddington weir alone could provide an estimated 1,860,000 kwh of electricity annually, sufficient for 600 homes and save around 1000 tonnes of carbon dioxide equivalents.

Given the RTS is considered one of the country's first nationally significant flood and climate adaptation projects, the scope and ambition of the scheme should provide an enlightened example of a holistic fully integrated approach towards optimising the performance and return on investment for public infrastructure that unlocks synergies and maximises co-benefits across social, economic and environmental sectors. In the context of a rapidly changing climate, the extent to which at-risk communities are able to adapt to the effects of projected climate change, depends on the effectiveness of climate mitigation measures to reduce carbon emissions.

**Second;** in the context where the Ukrainian conflict has exposed the vulnerability of the UK's energy system to the energy price volatility, the provision of locally-generated cost-effective, affordable energy for local residential, public, and commercial end-users, could strengthen the self-reliance and resilience of the local economy. Drawing on the experiences of similar energy schemes, small renewable energy power plants can have the ability to generate sustainable income for community funds. These funds can be used to support low carbon projects, boosting local enterprises, contributing to a vibrant local economy and improving the lives and livelihoods of local people. Collectively, these benefits serve to unlock the river Thames' economic potential and promote locally-led sustainable and inclusive economic growth (RTS Goal 4).

**Third;** At the time of writing this submission, the Tags Island residents association, adjacent to the Molesey weir, have set up a CIC 'Thames Community Hydro' and have submitted an application for finance to the Community Energy Fund. Informed by earlier experiences with the proposed Ham-Teddington hydro project, although there are challenges to developing hydropower installations, it is apparent there is strong interest within the local communities for the installation of hydropower across the lower Thames weirs. In so doing, this may enable the Environment Agency to achieve cost efficiencies in capital expenditure by sharing infrastructure upgrade costs across stakeholders and constructing revenue generating assets for the subsequent operating and maintenance of these installations.

In conclusion, the proposed River Thames Scheme provides a once in a lifetime opportunity to integrate appropriate hydro power installations into the lower Thames weir structures, thereby unlocking the economic, health and environmental benefits of the river between Egham and Teddington. The installation would be a practical demonstration of recent remarks by Cllr Tim Oliver, Leader, Surrey County Council "The RTS is a great opportunity to take a holistic approach to improving the environment, enhancing people's lives, and supporting our climate change goals. This is a long-term investment, and the RTS will provide a positive legacy beyond flood risk reduction and water management in our communities. We welcome your involvement and views to deliver this hugely beneficial scheme". RTS Statutory Consultation Brochure 2024.

Moreover, the development of a fully integrated RTS scheme is in alignment with the vision and principles of HMG's Infrastructure and Projects Authority (IPA) "Transforming Infrastructure Performance- Roadmap to 2030", notably "optimisation". The process of optimisation involves achieving better outcomes for society from the existing built environment, including how to integrate new components more effectively. This could mean making a physical change or altering the way a service is provided through adjusting the operational regime, including maintenance, repurposing and physical upgrades.

We look forward to hearing your formal response to our submission to the RTS statutory consultation.

Yours faithfully, on behalf of Transition Town Kingston - Energy Group

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CC: Cllr Tim Oliver Surry County Council; Caroline Douglass, Environment Agency