

Transition Town Kingston - Energy Group (TTK-EG)

19<sup>th</sup> December 2022



**Environment Agency: River Thames Scheme. TTK-EG Submission to Public Consultation**

Dear Sir / Madam,

We 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 projects to assist the transition to a sustainable low-carbon future.

This letter is written as a contribution to the Environment Agency's public consultation on the proposed *River Thames Scheme*. From our understanding, the scheme is intended to provide a long-term sustainable plan to protect homes and businesses, enhance the environment and boost the local economy. This includes works to improve existing river structures and channels to reduce the risk of flooding between Egham and Teddington, which is increasing due to climate change. The large scale of the scheme means the project has national significance status, with the final scope and design of the project yet to be fully determined pending feedback from the public consultation process.

The scheme includes physical improvements to the Thames weir structures, including the first and largest weir on the non-tidal part of the river located between Ham and Teddington which is operated and maintained by the Environment Agency. Significantly from the TTK - Energy Group perspective, in 2011 the Ham Hydro community interest company obtained rights to develop a small-scale hydropower project at the weir:

- I. To generate clean electricity, thus reducing carbon emissions locally and nationally
- II. To generate income to support low-carbon solutions in Ham and surrounding areas

However, following an appeal led by the Lensbury Club, planning permission to develop the hydropower project was subsequently withdrawn in 2016. The Lensbury, an important local employer whose property is located immediately adjacent to the proposed area, had a number of concerns about the hydro project related to: 1) noise; 2) flooding; 3) environmental and visual impacts. Although successful in their appeal, the Lensbury stated that they remained supportive of an appropriate hydro power development at Teddington and would be open to cooperation with Richmond Council and the project's developer to ensure an appropriate scheme can be progressed.

Since that time the energy landscape has changed significantly making a previous strong business case even more attractive. It is apparent from recent discussions with those involved in the Teddington project, there remains strong interest across the local community for such a scheme, including from the new owners of the Lensbury. By learning from the experiences of the former Ham hydro directors and applying an appropriate multi-stakeholder consultative process to assess the impacts, benefits and suitability of the proposed works, we believe there is a strong rationale for the integration of small-scale hydro power generation at the Teddington and other weir structures within the River Thames Scheme, including Sunbury and Molesey. This could result in significant financial savings for the Environment Agency due to the efficiency of constructing revenue generating assets, whilst at the same time upgrading the weirs to meet the requirements of the River Thames Scheme.

Accordingly, with the proposed upgrading of the structures as part of the River Thames Scheme, the TTK - EG believes these infrastructure investments provide a once in a lifetime opportunity to integrate appropriate hydro power developments into the Teddington and other weirs, as an integral component of the wider flood protection scheme. These public investments could unlock synergies across separate, albeit connected, policy agendas to achieve mutually reinforcing objectives that provide optimal solutions for the natural environment, the built environment and the provision of services:

- I. Improved flood protection, including enhanced weir discharge capacities during peak flow conditions in line with climate change adaptation and disaster risk reduction requirements
- II. Generate an environmentally friendly and sustainable source of energy, reducing local carbon emissions, contributing to national climate mitigation targets, and improving the environment
- III. Provision of cost-effective, affordable energy for local residential, public, and commercial end-users (incl. the Lensbury) at a time of unprecedented energy price inflation and energy security concerns
- IV. Generate sustainable income for community funds to develop low carbon projects, contribute to the local economy and improve the wellbeing of local people
- V. Strengthen relationships, social cohesion, community resilience and public-private collaboration, including raising environmental awareness and increase engagement in civic life and place making
- VI. Enable the Environment Agency to achieve cost efficiencies in capital expenditure by sharing infrastructure upgrade costs across stakeholders and constructing revenue generating assets

The weirs between Egham and Teddington are the largest on the river Thames and are ideal locations for small-scale hydro power generation. 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.

In the context of rising energy costs and a rapidly changing climate, where despite progress being made, the UK and neighbouring countries are not on track to achieve net zero for the +1.5 C Paris target, the need for integrated solutions has never been stronger. The River Thames Scheme could provide an enlightened example of a holistic cross-sector approach to optimise the performance and resilience of existing riverine infrastructure assets, that increases return on investment and maximises impact by achieving multiple co-benefits.

Such an integrated approach would be in full alignment with the vision and principles of HM government's new white paper on *Transforming Infrastructure Performance- Roadmap to 2030*. Moreover, a community-based approach aligns strongly with the UK's National Resilience Strategy, which encompasses a whole-of-society all-risks approach - where strengthening the resilience of local communities builds the foundation of a more resilient nation.

*"Infrastructure connects us to each other and the natural environment, and is the foundation of the services we depend on. It is essential we focus on outcomes that we need for people and nature when we are choosing where and how to intervene"*

*"To meet the Sustainable Development Goals, and put the UK on the path to net zero emissions, the Government must ...rewire its decision-making and other processes in order to embed respect for nature... and support more effective long-term partnership with the private and voluntary sectors"*

Lord Agnew Minister of State, Cabinet Office & Jesse Norman MP Financial Secretary for the Treasury. **Transforming Infrastructure Performance - Roadmap to 2030**. HM Government White Paper 2022

In support of the vision and ideas outlined in this letter, representatives from the TTK-EG would be available to meet with the Environment Agency in the New Year to discuss these proposals further. This would provide a valued opportunity to understand EA's perspectives on these matters and consider how we could collaborate to influence the design of the River Thames Scheme to capitalise on this unique and nationally significant scheme to directly address some of the country's most critical challenges.

For your information, we have shared the content of this submission to the public consultation with our representatives of national and local government. We fully recognise that to bring these ideas to fruition will require a genuine multi-stakeholder consensus building approach. We express our willingness to engage with the Environment Agency and other relevant actors in an open, constructive manner to support the building of effective long-term partnerships between the public, private and voluntary sectors.

We look forward to hearing from you.

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

Marcus C. Oxley BSc (Eng) MSc F-ISRMI; Patrick Manwell BA Dip Arch RIBA; Damon Hart-Davis MSc

Peter J. Mason BSc (Eng) ACGI FICE; Mark Handley BSc (Hons) CEng MIET

[Marcus.c.oxley@gmail.com](mailto:Marcus.c.oxley@gmail.com)