

DOCKETED	
Docket Number:	22-ERDD-03
Project Title:	Clean Hydrogen Program
TN #:	252812
Document Title:	T2M Global, LLC Comments - T2M global Response to Docket # 22-ERDD-03 - Onsite Distributed Hydrogen Production and End Use Solicitation Concept
Description:	N/A
Filer:	System
Organization:	T2M Global, LLC
Submitter Role:	Applicant
Submission Date:	10/27/2023 3:49:15 PM
Docketed Date:	10/27/2023

*Comment Received From: T2M Global, LLC
Submitted On: 10/27/2023
Docket Number: 22-ERDD-03*

T2M global Response to Docket # 22-ERDD-03 - Onsite Distributed Hydrogen Production and End Use Solicitation Concept

T2M Global's response to Docket # 22-ERDD-03 "Onsite Distributed Hydrogen Production and End Use Solicitation Concept" is included as an attached PDF file.

Additional submitted attachment is included below.

T2M Global's Response to CEC - "Distributed Hydrogen Solicitation Concept 22-ERDD-03"

1. Are the Project Elements in Section IV of this document realistic, reasonable, and feasible?
 - The 10 months of cumulative operation within the 4-year project period becomes potentially difficult when design, permitting, equipment fabrication/procurement, and site construction/modification are considered. The largest concern results from the uncertainty in the permitting process. We recommend reducing the operation time to somewhere between 6-8 months and provide support for permitting as detailed in the response to question 6.
2. What would be the appropriate level of project funding that would leverage private investments associated with the work proposed in this draft concept, and why?
 - We believe that the initial \$7-10 Million per project would be appropriate to leverage private investments.
3. How would limiting the use of grant funds to Eligible Project Costs in Section III impact the project? What changes do you recommend, if any, and why?
 - Limiting site construction and preparation costs to 5% would make for a very tight budget. We recommend increasing this, preferably up to 10%.
4. Provide any feedback on the two-phase solicitation approach. Are the 1-month abstract deadline and 3-month full application deadline realistic?
 - The two-phase solicitation approach is a good idea. This allows for a more thorough consideration of proposals and ensures that only the most viable projects progress to the full application stage.
Regarding the proposed timelines, a one-month abstract deadline followed by a three-month full application deadline seems reasonable. It provides sufficient time for applicants to prepare and submit their abstracts, and subsequently allows for a more comprehensive development of their full applications. This timeline strikes a good balance between efficiency and thoroughness in the evaluation process.
5. To ensure that funded projects and their impacts can inform future deployment of hydrogen in California, should the CEC consider additional performance metrics beyond those proposed for the M&V plan in Section IV?
 - Quantified benefits of the use of any waste streams, converted to value in the proposed process.
6. What type of technical assistance is needed to ensure equitable participation and project success, if any?
 - The permitting process and compliance with all local, state, and federal requirements is a large barrier. Many of these processes are not streamlined and involve multiple agencies. Without this assistance, it would be difficult to comply with the project time requirements. Technical assistance in this field would ensure more equitable participation and success in CEC projects as a whole.

7. Are there specific end uses we should target with the one to five metric ton hydrogen capacity? If so, why?

- There are many difficult to decarbonize sectors that can benefit from the one to five-ton hydrogen production. It is our belief that long duration energy storage is one field that can benefit greatly from Hydrogen given its high energy density, cost-effective scaling, and incredibly long storage potential. Including grid support as an onsite use would allow for more widespread deployment. In-state green ammonia and steel production as well as heavy duty vehicle fueling would also be a great boon to California.

8. Are there any concerns with this solicitation allowing the use of CCUS for a project to be carbon neutral? If so, why?

- The use of CCUS to allow a project to become carbon neutral is a very beneficial plan. Through CCUS, the technology can potentially go beyond carbon neutrality, and become carbon negative.

9. Please provide relevant comments regarding other considerations not explicitly listed above.

- We believe that electrolysis should not be limited to water as a feedstock, and include all Hydrogen sources/feedstocks, so long as they can meet the project goals of 0.45 kg CO₂e/kg H₂ produced. In parallel, any wasted resource streams should be considered. Additionally, unrecovered waste Hydrogen sources (which in many cases would originally be burned for their heat value) should be considered favorable.