

ENERLAC

THEMATIC DOSSIER

CALL FOR PAPERS

"40 years of the Regional Program for Small Hydroelectric Power Plants of the Latin American Energy Organization (OLADE)"

1. Guest thematic editors:

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2. Objective: To analyze the current situation of small hydroelectric power plants (SHP) in the countries of Latin America and the Caribbean, facing contemporary environmental conflicts, and to draw a perspective of the sector 40 years after the implementation of *OLADE's Regional Program for Small Hydroelectric Power Plants* with the purpose of generating analytical perspectives on the operation and implementation of SHP.

Articles can cover the following topics related to PCHs:

- Pre-feasibility analysis
- Feasibility analysis
- Use of flow
- Development in productive areas
- Project feasibility
- Potential hydroelectric generation capacity
- Environmental management



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- Socio-economic evaluation

3. Scope: Latin American and the Caribbean countries

Target audience: Researchers, specialists, professionals and the academic community in LAC.

5. Article submission period: from November 08, 2021 to January 14, 2022.

6. Publication of accepted articles: June 2022

7. Languages of postulated articles: Spanish, English, Portuguese

8. Application guidelines and parameters:

8.1. The submission and review process of papers and/or articles will be carried out through the journal's Open Journal Systems (OJS) editorial manager, therefore, the submitted papers should only be sent through this system.

8.2. Registration of Authors interested in submitting papers/articles to ENERLAC will be carried out through the journal's platform:

<http://enerlac.olade.org/index.php/ENERLAC/user/register>

8.3. The submission of articles will be made in the formats found in the links below: Spanish and English.

8.4. The external evaluation of the articles will be in charge of experts from the region and academia, through the double blind modality.

8.5. The initial and final selection filter of the nominated articles will be in charge of the Editorial Committee of the Journal.

8.6. For more information on editorial policy for submitting articles visit:

- About the Journal:
<http://enerlac.olade.org/index.php/ENERLAC/about/sobrerevista>
- Guidelines for Authors:
<http://enerlac.olade.org/index.php/ENERLAC/about/dirautores>
- Article evaluation process:
<http://enerlac.olade.org/index.php/ENERLAC/about/sobrerevista>

8.7. Authors must send the Declaration of originality of the submitted paper in the following formats: Spanish, English.

9. Justification:



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Since its creation, the Latin American Energy Organization (OLADE) has emphasized the importance of hydropower for the region, whose large-scale exploration could represent an alternative for generating energy in the face of the oil crisis and the need to bring energy to the region's rural population. The Organization saw the need to rethink the region's energy model, based on the intensive use of oil and gas, after the 1973 oil crisis, which foresaw a depletion of the reserves of these resources in the 20th century. In 1980, 64.7% of the energy consumed in the region came from fossil fuels, while hydroelectricity contributed only 15%, although it represented 66.6% of the available energy resources. Thus, OLADE argued that harmonious development should be based on an energy model that takes advantage of the potential of available resources and technological investment.

In the case of the rural population, considered as a group with low energy consumption, the Organization assumes an improvement in the quality of life with a small increase in the energy supply, since the lack of energy contributes to a reality of precariousness and misery. In the 1980s, 51% of the population of Latin America lived in rural areas, a situation that made it difficult for this group of people to access energy distribution systems. The Organization estimated that only 50% of the population had access to energy in that period, a figure that dropped to about 15% when it comes to the rural population.

Therefore, in OLADE's opinion, taking advantage of the hydroelectric generation potential through SHPs, so far underutilized in the region, could contribute significantly to the solution of the problems presented above, given that the region has an abundance of small-scale water resources. Besides guaranteeing energy supply to rural populations that were not yet included in the development policies of the countries of the region, making possible the development of small industries, health centers, schools, and improvements in irrigation and rural production systems, investment in hydroelectric power would also reduce dependence on fossil fuels.

During the years that the program was in execution, OLADE published several studies in its publications "Energy Newsletter" and "Energy Journal", mainly focused on the development of methodologies, technologies and equipment for SHP. Starting in 1984, the Organization began to collect information on the experiences of the countries of the region with the planning and construction of hydroelectric power plants, which were compiled and published, between 1987 and 1988, in four editions called "Regional Document of National Experiences in Small Hydroelectric Power Plants." In the first document, the Organization states that, of the 15 countries consulted, practically all had or were establishing a National Program for SHPs, with a view to supporting the social and economic development of the rural sector and making the installation of these plants simpler and cheaper. In subsequent issues of the document, case studies were published for the following countries: Argentina, Brazil, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guyana, Honduras, Jamaica, Mexico, Panama, Peru, Suriname and Venezuela.



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Since the 1980s, small hydroelectric power plant projects have expanded around the world and the debate about the social, environmental and economic impacts generated by these ventures has grown in the last two decades. During this period, the debate also grew in relation to cumulative and synergistic impacts, as well as in relation to environmental assessment, especially when several small hydroelectric plants are concentrated in the same river basin (cascade effect), which calls into question the very licensing adopted and the idea that small hydroelectric plants do little or no harm.

If, on the one hand, there has been growth in this sector, on the other hand, although at a slower pace, progress has been made in the scientific and environmental discussions involving these projects, including the questioning of the sustainability aspect of these undertakings, as well as the distribution of charges and bonuses generated. In the context of climate change, the growth of conflicts over water use, the scarcity of natural resources and the proliferation of small hydroelectric power plant projects, it is necessary to understand how the sector has advanced in Latin America, how the impacts were produced and how they were distributed among the population and society, as well as to understand who won and lost with these ventures and what effects can be measured over these decades.

In this context, **the thematic dossier proposes to analyze the current situation of small hydroelectric plants in Latin America, in the face of contemporary environmental conflicts, and to draw a perspective of the sector 40 years after the creation of the Regional Program of Small Hydroelectric Plants of OLADE, with the purpose of generating analytical perspectives on the operation and implementation of SHP.**

10. For more information, contact: enerlac@olade.org

Quito M.D., November 08, 2021



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