

Piauí Solar: State Development Impulsed by Solar Photovoltaic Energy

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Abstract : In Piauí, the Brazilian state, solar energy has become one of the renewable sources targeted by internal and external investments, with the intention of leveraging the development of society. However, for a residential or business consumer to be able to deploy this source, there is usually a need for a high initial investment due to its high cost. The countless high taxes on equipment and services are one of the factors that contribute to this cost and ultimately fall on the consumer. Through analysis, a way of reducing taxes is sought in order to encourage consumer adhesion to the use of photovoltaic solar energy. Thus, the objective is to implement the Piauí Solar Program in the state of Piauí in order to stimulate the deployment of photovoltaic solar energy, through benefits granted to users, providing state development by boosting the diversification of the state's energy matrix. The research method adopted was based on the analysis of data provided by the Teresina City Hall, by the Brazilian Institute of Geography and Statistics and by a private company in the capital of Piauí. The account was taken of the total amount paid in Property and Urban Territorial Property Tax (IPTU), in electricity and in the service of installing photovoltaic panels in a residence with 6 people. Through Piauí Solar, a discount of 80% would be applied to the taxes present in the budgets regarding the implementation of these photovoltaic plates in homes and businesses, as well as in the IPTU. In addition, another factor also taken into account is the energy savings generated after the implementation of these boards. In the studied residence, the annual payment of IPTU went from R \$ 99.83 reais to R \$ 19.96, the reduction of taxes present in the budget for the implantation of solar panels, caused the value to increase from R \$ 42,744.22 to R \$ 37,241.98. The annual savings in electricity bills were estimated at around R \$ 6,000. Therefore, there is a reduction of approximately 24% in the total invested. The trend of the Piauí Solar program, then, is to bring benefits to the state, providing an improvement in the living conditions of the population, through the savings generated by this program. In addition, an increase in the diversification of the Piauí energy matrix can be seen with the advancement of the use of this renewable energy.

Keywords : development, economy, energy, taxes

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