

**WORKING DOCUMENT PREPARED IN COMPLIANCE WITH THE
AGREEMENT SIGNED BY AND BETWEEN CONCYTEG**

AND

**THE RENEWABLE ENERGY AND ENERGY EFFICIENCY
PARTNERSHIP (REEEP)**

**FUNDED BY: THE RENEWABLE ENERGY AND ENERGY EFFICIENCY
PARTNERSHIP**

**CONSTRUCTION AND URBAN DEVELOPMENT
REGULATIONS PROPOSED FOR RENEWABLE
ENERGY USE IN THE STATES AND COUNTIES
OF MEXICO**

STATEMENT OF LEGISLATIVE INTENT

Whereas our country and its municipalities have significant solar resources to develop industry and apply such energy sources in construction processes;

Whereas the first step to develop these Model Regulations was an analysis of laws and regulations of Argentina, Germany, the United Kingdom and the United States, among others, in order to determine basic solar energy organization and promotion schemes;

Whereas these proposed Bioclimatic Construction and Urban Development Model Regulations are aimed at establishing a specific legal framework to promote and support technology applications that allow to benefit from renewable energy sources in housing, commercial, public, industrial and agribusiness facilities;

Whereas these Regulations are intended to promote application of such energy sources for construction processes in marginalized areas traditionally excluded from the usual energy system;

Now therefore, these CONSTRUCTION AND URBAN DEVELOPMENT REGULATIONS FOR RENEWABLE ENERGY USE, aimed at regulating in a consistent and standardized manner municipal activities to promote the application of solar energy sources, are hereby submitted for consideration pursuant to the following chapters:

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|-----------------|--|
| ONE.- | General Provisions |
| TWO.- | Authorities |
| THREE.- | Solar Energy under a Municipal Territorial Management Plan |
| FOURTH.- | Solar Energy Use in Municipal Housing |
| FIVE.- | Registry of Urban Developments with Solar Applications |
| SIX.- | Registry of Energy Applications |
| FIVE.- | Solar Energy Application in Marginalized Areas |
| EIGHT.- | Solar Energy Application in Street Lightning |
| NINE.- | Inspection and Penalty Procedure |

Whereas these proposed regulations are intended to include administrative simplification criteria, so that the best efforts shall be made to make them easy to understand and minimize filings for citizens;

Whereas Town Councils are in charge of urban development regulations establishment, zoning management, and environmental preservation and restoration;

Now therefore, the Hon. TOWN COUNCIL OF _____
MUNICIPALITY is asked to review the following:

EXECUTIVE ORDER

SOLE.- BIOCLIMATIC CONSTRUCTION AND URBAN DEVELOPMENT
REGULATIONS as follows:

CHAPTER ONE General Provisions

Article 1.- These Regulations are intended to enforce municipal standards to:

- I. Define general technical criteria to develop territorial management plans focused on solar energy application in construction;
- II. Establish a legal action framework for municipal authorities in the areas of promotion and use of solar energy;
- III. Characterize both a Registry of Solar Urban Developments and a Registry of Energy Applications;
- IV. Characterize the building permits required inside and outside solar urban developments;
- V. Establish arrangements for solar energy application in marginalized communities;
- VI. Promote solar energy application in street lightning;
- VII. Provide guidelines to reach an appropriate level of energy efficiency by profiting from climatic conditions;
- VIII. Define an action framework for authorities to enforce these Regulations and impose the relevant penalties for violations.

Article 2.- The responsibility for solar energy promotion and use in buildings falls to the Municipality, in coordination with the Federal and State Governments.

Municipal authorities, in coordination with the federal and state authorities, shall oversee compliance with official standards on energy efficiency and savings as required to enforce these Regulations.

Article 3.- Municipal academic, economic and social sectors, as well as scientific and

technological communities shall aid the Municipality in developing plans and programs for solar energy use in buildings.

CHAPTER TWO Authorities

Article 4.- The following are competent authorities to enforce these Regulations:


- I. The Town Council;
- II. The Mayor;
- III. The Municipal Administrative Unit in charge of Urban Development; and
- IV. Other applicable Municipal Government agencies and entities as provided in these Regulations.

Article 5.- The Town Council shall have the following powers and duties:

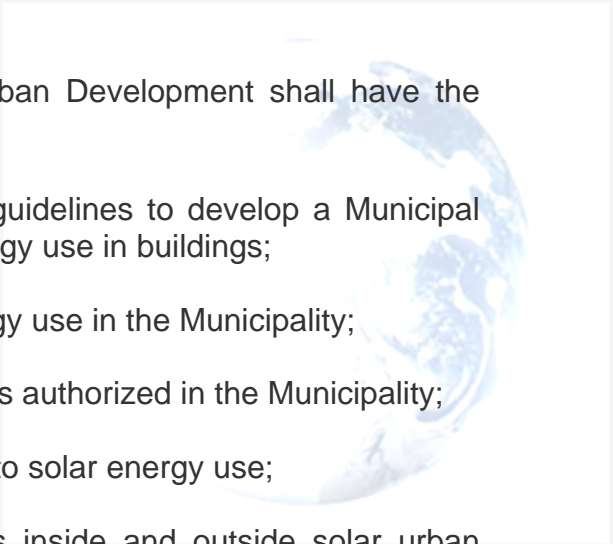
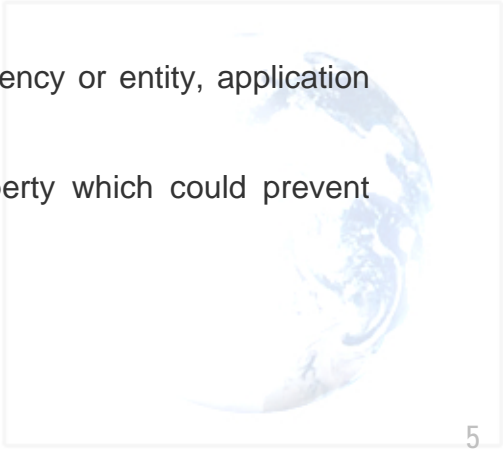
- I. Approve a territorial management Plan focused on solar energy applications;
- II. Define zoning for building solar urban developments in the Municipality;
- III. Assign the expense budget resources needed for solar energy application in street lightning and municipal property;
- IV. In coordination with federal and state authorities, enforce compliance with the official standards for energy efficiency and savings pursuant to these Regulations;
- V. Execute any kind of legal acts as required to enforce these Regulations; and
- VI. Any other powers and duties as provided by the applicable laws and regulations.

Article 6.- The Mayor shall have the following powers and duties:

- I. Submit to the Town Council proposed technical and scientific surveys for determining the municipal climatic conditions to use solar energy;

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- II. Provide administrative guidelines to speed up issuance of building permits for solar urban developments, in order to reduce response times;
 - III. Submit to the Town Council a proposed budgetary allocation for investment in solar energy street lightning in marginalized areas;
 - IV. Submit to the Town Council the creation of task forces to aid in solar energy application in the Municipality;
 - V. Participate in the Federal and State Technical Commissions on promotion and use of solar energy, in representation of the Municipality;
 - VI. Submit proposed solar energy application in buildings to the municipal agencies or entities in charge of regularization of land property; and
 - VII. Any other powers and duties as established by these Regulations and the applicable legal provisions.

Article 7.- The Administrative Unit in charge of Urban Development shall have the following powers and duties:

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- I. Submit to the Mayor a proposed set of general guidelines to develop a Municipal Territorial Management Plan focused on solar energy use in buildings;
 - II. Submit to the Mayor the best zoning for solar energy use in the Municipality;
 - III. To keep a Registry of the solar urban developments authorized in the Municipality;
 - IV. Keep a Registry of Energy Applications as related to solar energy use;
 - V. Issue building permits as for energy applications inside and outside solar urban developments;
 - VI. Develop, in coordination with the applicable municipal agency or entity, application programs for solar energy in public lightning;
 - VII. Perform visual inspections to close or surrounding property which could prevent solar energy use;
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- VIII. Perform inspection visits to holders of owners of solar energy buildings.
- IX. Impose the relevant penalties for violations to these Regulations; and
- X. Any other powers and duties as established by these Regulations and the applicable legal provisions.

CHAPTER THREE

Solar Energy under a Municipal Territorial Management Plan

Article 8.- The Municipal Territorial Management Plan shall include an exhibit containing a technical study of climatic conditions in the Municipality that determines the best areas or regions to use solar energy in buildings.

Article 9.- The study shall be updated annually and aid to promote solar urban developments construction in the Municipality.

Article 10.- The study shall include the following:

- I. A solar radiation capacity analysis on population centers in the Municipality;
- II. A description of the best heat axes to use solar energy in each population center;
- III. The municipal climate calendar for solar energy use;
- IV. A description of lightning conditions and schedule for solar energy use in the Municipality;
- V. A set of guidelines to install solar heaters;
- VI. Technical criteria for an efficient and optimum application of energy in streets and roads;
- VII. A list of the best regions for building solar urban developments;
- VIII. A list of reserved surrounding areas to facilitate solar energy use;
- IX. A list of the best lightning hours for municipal government buildings; and

- X. A solar radiation capacity study on marginalized zones currently excluded from usual electricity supply.

Article11.- For new population centers development, the Municipality shall give preference to regions with the highest solar radiation capacity to promote solar energy use for heat and power generation.

In issuance of building permits, the Administrative Unit in charge of Urban Development shall oversee compliance with the official norms regarding energy diversification and efficiency. For individuals to fulfill this obligation, it shall be sufficient that they produce a certificate of compliance issued by the competent authority or federal agency.

CHAPTER FOUR Solar Energy Use in Municipal Housholds

Article 12.- In the development of Housing Construction Programs focused on energy applications, the Administrative Unit in charge of Housing shall take into account the opinions of the local architects and engineers associations and abide by the Municipal climate conditions technical study.

Article13.- The construction of new housing developments shall be based on the above-mentioned Program, in order to profit from the best solar radiation conditions.

Article14.- The Municipal Administrative Unit in charge of Housing, together with the local architects and engineers associations shall organize working sessions to design strategies aimed at abating the costs of the technology needed to utilize solar energy in households, as well as a Municipal Program to Reduce the Costs of Solar Energy.

Article15.- Solar energy applications shall induce house owners and holders to make an efficient utilization of energy, water and climate conditions.

Building techniques applied shall allow a sustainable use of appropriate construction materials, and comply with rules and regulations on energy efficiency.

Article16.- The Municipal Administrative Unit in charge of Housing shall give every administrative facility to build solar urban developments in favorable regions to utilize this kind of resources, most of all in those traditionally excluded from the usual energy services.

Article 17.- Solar energy applicability studies submitted by constructors for the consideration of the The Municipal Administrative Unit in charge of Housing shall specify the following:

- I. Pre-installation systems for the use of solar energy, including solar heaters;
- II. Pre-installation systems for water and waste recycling;
- III. A bioclimatic housing profile that explains utilization of environmental conditions;
- IV. Use of recycled materials related to the construction process;
- V. Environmental lighting capacity of households;
- VI. Cost of technology for solar energy utilization;
- VII. Maintenance costs of the technology used and maintenance services providers;
- VIII. Addresses of the providers of solar energy technology; and
- IX. Energy generation systems for environmental contingencies.

Article 18.- A pre-installation system involves the use of a design and construction method that provides the technologic systems required to utilize solar energy. This kind of system shall be compulsory only for solar urban developments.

Article 19.- The Municipal Administrative Unit in charge of Housing shall grant an annual public award to solar urban developments constructors in order to publicize success cases.

Article 20.- The Municipal Administrative Unit in charge of Housing, together with the architects and engineers associations in the Municipality, may organize training and outreach seminars on the application of solar energy in construction.

CHAPTER FIVE Registry of Solar Urban Developments.

Article 21.- Building permits for solar urban developments shall be issued pursuant to the Regulations for Urban Developments in the State's Municipalities. In any event, the Mayor shall give any facility to speed up the issuance of definitive building permits for this kind of developments.

Article 22.- Administrative incentives and facilities may include:

- I. A reduced resolution period;
- II. Simplified filings and requirements;
- III. Legal advice on filings and procedures;
- IV. Any other incentives and facilities as determined by the Town Council.

Article 23.- Building permits for solar urban developments shall be published in the State Official Gazette as well as recorded in the corresponding Public Registry of Real Estate Property and the Registry described below.

Article 24.- Administrative Unit in charge of Urban Development in the Municipality shall keep a registry of solar urban developments according to the following purposes and intended uses:

- I. Housing;
- II. Industrial;
- III. Trade; and
- IV. Any other purposes and intended uses as determined by the Town Council.

Such Registry shall assign to each urban development a folio, which will contain the building permits, official alignment and street number obtained by owners and holders.

Article 25.- The Municipal Administrative Unit in charge of Housing shall have the exclusive responsibility for organizing and maintaining such Registry. Recording in the registry shall be made ex-officio by the corresponding authority.

Artículo 26.- To initiate any construction, extension or remodeling within a solar urban development, citizens shall file the respective permit with the Administrative Unit in charge of Municipal Urban Development. Such Unit shall ensure that the project involved does not affect neither the right to sunlight of other owners or holders nor the natural lightning capacity of the lots.

Article 27.- Citizens who apply for such permits shall submit a plan specifying that the construction works will not affect the right to sunlight of other owners or holders.

Article 28.- Upon issuance of building permits for lots surrounding solar urban developments, the Administrative Unit in charge of Urban Development shall verify that no owner's or holder's right to sunlight is affected, for which purpose a descriptive plan shall be annexed to the respective permits.

Article 29.- In no event the Administrative Unit in charge of Urban Development may issue a building permit when third parties' right to sunlight is affected; otherwise, the permit shall be rendered null and void.

Article 30.- In the event that a building permit is issued in breach of these Regulations, the Mayor, through the Legal Bureau, may initiate an action for damages before the competent administrative agency in order to obtain a construction work suspension warrant.

CHAPTER SIX Registry of Energy Applications

Article 31.- The Administrative Unit in charge of Urban Development shall keep a Registry of Solar Energy Applications in real property outside solar urban developments, which will contain the corresponding building permits and alignment licenses.

Article 32.- Such Registry shall also indicate the data of owners or holders of lots utilizing solar energy, or simply making a specific use of such energy or of natural lightning.

Owners, holders or constructors of any kind of buildings shall be subject to the official federal standards on energy saving and efficiency. Therefore, they shall produce a certificate of compliance issued by the competent authority or agency.

Article 33.- Before issuing a building permit, the Administrative Unit in charge of Urban Development shall verify in the above mentioned Registry that no neighbor or surrounding lot right to sunlight will be affected by such construction.

Article 34.- The owners or holders of lots located outside solar urban developments that are recorded in the Registry shall post a visible external plate indicating the use of solar energy.

Article 35.- Such owners or holders shall obtain a notarial certification evidencing the posting of the above mentioned plate, which shall be recorded in the Public Registry of Real Estate Property and the Public Commercial Registry, in the corresponding real estate folio.

CHAPTER SEVEN Solar Energy Application in Marginalized Areas

Article 36.- The Municipality shall implement programs focused on solar energy use for street lightning in marginalized areas traditionally excluded from the usual energy system.

Article 37.- Photovoltaic cells may be used for street lighting in marginalized regions, as well as photo-thermal cells for water pumping and solar heaters in the Municipality.

Article 38.- Municipalities shall assign an annual line item from their expense budget for light generation with photovoltaic cells in marginalized regions. For the purposes of this chapter, a marginalized region is defined as an area deprived from the public lightning systems required to meet the needs of the respective population center.

CHAPTER EIGHT Energy Use in Street Lightning

Article 39.- The Municipality may utilize solar energy for street lightning in the following places:

- I. New population centers;
- II. Marginalized population centers;

- III. Public parks, gardens and squares;
- IV. Education or social welfare institutions;
- V. Sport facilities;
- VI. Reserved or ecological conservation areas;
- VII. Archaeological sites;
- VIII. Other public buildings, and
- IX. Such other areas as expressly authorized by the Town Council.

Article 40.- The Municipality shall coordinate with federal and state authorities to implement solar energy self-supply systems for street lightning.

CHAPTER NINE Verification and Penalty Procedure

Article 41.- The Administrative Unit in charge of Urban Development shall be the competent authority to verify compliance with these Regulations. In the event that it is necessary to initiate a verification procedure, it shall be subject to the Rules and Regulations on Zoning and Land Use as well as the Construction Regulations.

Article 42.- The Administrative Unit in charge of Urban Development may impose the following penalties against individuals for violation of these Regulations:

- I. A fine of up to 50% of the value of construction;
- II. Temporary suspension of construction;
- III. Closing down of construction works;
- IV. Demolition of construction when third parties' right to sunlight is affected; and
- V. Imprisonment.

Article 43.- The penalties referred to in this chapter shall be imposed as provided by the

applicable Rules and Regulations on Zoning and Land Use.

TRANSITORY PROVISIONS

ONE.- These Regulations will come into effect on the date immediately following their publication in the State Official Gazette.

TWO.- Any regulatory provisions being in conflict with these Regulations are hereby abrogated.

THREE.- The Municipality shall complete the climate conditions technical study within _____ working days following the effective date of these Regulations.

