

NON-MONETARY INCENTIVES FOR GREEN BUILDINGS

MOBILISING PRIVATE INVESTMENTS

August 2021



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1. Introduction

This paper serves local and state authorities as a reference source to implement non-financial incentives to mobilise private investment in energy efficient residential and non-residential buildings. It describes different types of mechanisms and gives concrete examples that have been implemented in countries. The non-monetary incentives are based on case studies in different countries and contexts. Case studies are listed in the form of infographics or fact sheets with relevant information for their adoption and implementation in the local context.

These incentives can be used to promote a green economic recovery after the COVID-19 pandemic, while improving the habitability of buildings and public health, and reducing the risks of climate change. Governments are setting up large incentive or Green Recovery programmes, but existing or new financial incentives are not sufficient to encourage the construction of energy-efficient buildings. It is important to create different support and management strategies that are more compatible with the realities of the sector at the local, sub-national and national public levels.

2. Types of non-monetary incentives for energy efficient buildings

There are best practices from different countries that have been used to promote private sector participation and social acceptance of sustainable and energy-efficient construction projects. The most common ones are related to official “paperwork”, by reducing time and simplifying construction processes. Project bonuses have also been used across the globe. Incentives and recognitions and market tools are used less frequently, and finally, incentives that are not very common to date are those related to technical advice and public coordination.

Six types of non-financial incentives are introduced as non-monetary policy instruments for national governments and local administrations, such as:

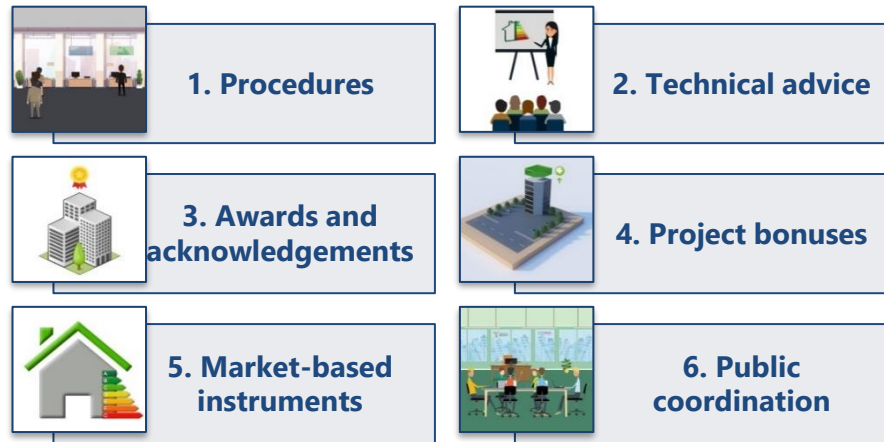


Figure 1. Classification of non-financial incentives

Procedures: Reduce processing times and simplify procedures

It is well known that one of the most recurrent areas of opportunity in construction is in the procedures in public offices, such as licences and construction permits, and connections to services such as water and drainage, whose processing can vary between 18 and 92 days.

Technical advice – to industry and public officials

One of the areas that needs to be strengthened at the local level is the strengthening of local authorities, as public officials often lack the tools to assess the technical feasibility of projects with sustainability criteria.

Awards and acknowledgements – As recognition of good practices

With the evolution and natural trend of the sustainability market, both in the management of companies, the updating of academic programmes, the constant preparation of construction professionals on the subject, as well as the updating of the industry's product catalogues, various frameworks have been developed, standards or certifications that support the cause, such as LEED®, EDGE® or Passive House® certifications, related to the design and performance of buildings, or product and system certifications such as FIDE® or Energy Star® seals, which establish requirements that go beyond current regulations.

Project bonuses – For the urban and architectural design

Land use plans (where they exist) or land use plans are often subject to discussion by private parties to promote changes in their favour, and when this discussion is brought to the state, the state does not guarantee approval. The advantage of this incentive lies in the possibility of adding flexibility to building regulations and land use plans after presenting a highly efficient building project.

Market-based instruments – To raise awareness and recognition

It is quite common today to find marketing tools for the promotion of a product or brand, such as restaurant vouchers, loyalty cards, discount cards or memberships. These mechanisms are widely accepted by the population, who have successfully understood and assimilated their functioning.

In the case of buildings with high energy performance, the government could link a tool similar to a benefit card, to be used for public transport, discounts in the payment of services such as restaurants, theatre, concerts, or even discounts in the payment of taxes, school fees, or give priority attention in public offices for the completion of various procedures.

The application of market tools helps to raise awareness and empower end-users, strengthening the relationship between supply and demand.

Public coordination – Facilitating local policy implementation

Due to the nature and autonomy of local governments, coupled with the various problems that affect them, cited in previous sections (lack of information, capacities, resources, time, political will, among others), federal institutions find it difficult for national policy to be applied in the local context. An example of this is the differences in criteria between institutions and public works or municipal urban development offices regarding regulations, criteria and elements of design, construction, work control or mandatory reports, causing delays and inconveniences in the work where the first affected is the developer.

For this reason, it is important to set up dialogues, initiatives and programmes that promote coordination on the public agenda between the various institutions involved in construction and building during its processing, construction, evaluation, operation and even rehabilitation and demolition.

3. Good practice 'toolbox' of non-monetary incentives around the world

In the following, different non-monetary incentive practices are introduced. This practices toolbox contains a basket of non-financial incentives that require little or no public investment but can help mobilise private investment.

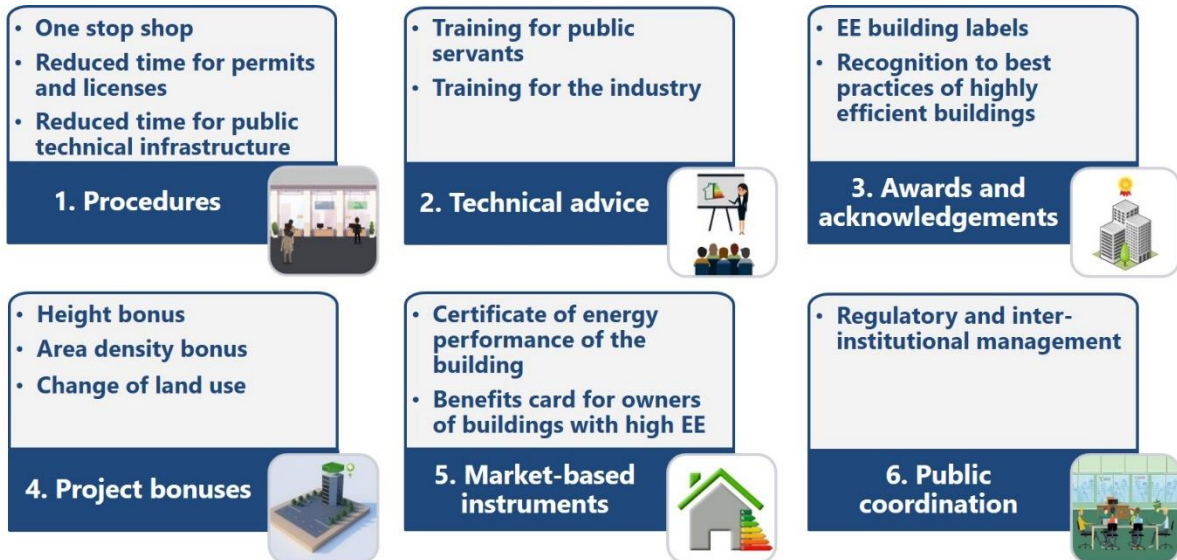
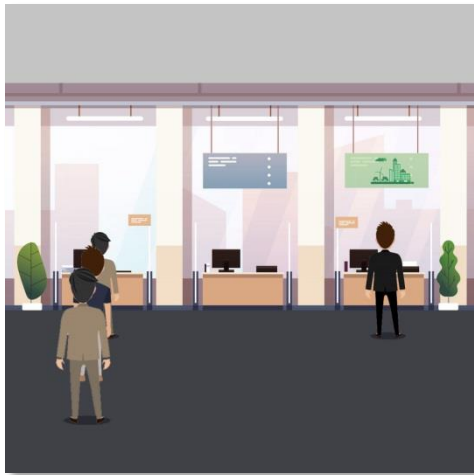


Figure 2. Examples of non-financial incentives

PROCEDURE: ONE-STOP SHOP



Example: Washington, D.C. (USA)

- One-stop shop for specific procedures for LEED-certified projects.

Source:

<https://meridian.allenpress.com/jgb/article/3/2/46/199898/A-Climate-for-Change-Green-Building-Policies>

Survey participants

- 27% Academia
- 25% Consultants
- 15% Private suppliers
- 11% Private developers
- 9% Households
- 7% Public sector
- 6% Other

What does it consist of?

The municipal office responsible for construction project procedures operates a special one-stop shop to deal with high energy efficiency projects.

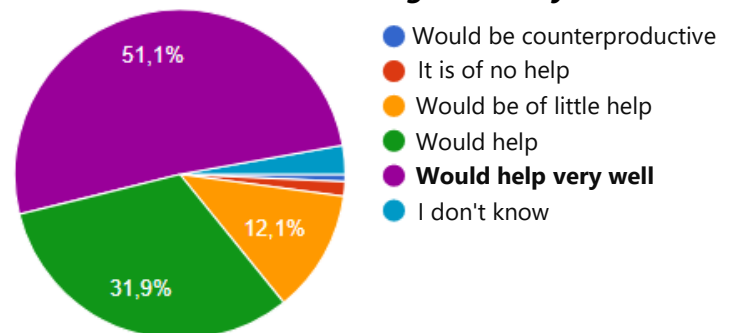
Benefits

- Simplification of procedures.
- Greater clarity and better monitoring of the status of procedures.
- Prioritization for differentiated projects with high energy efficiency standards, so that the private sector finds it attractive to reduce the number of visits to different municipal departments, by doing so only in one.

Recommendations

- Training of public servants.
- Linking existing national standards and codes as a prerequisite.
- Recognize independent sustainable building certification, such as LEED, EDGE, BREEAM, Passive House, or national ones like EcoCasa in Mexico.

Digital survey results



According to the survey applied, this initiative would have a high chance of success in Mexico.

PROCEDURE: REDUCED TIME FOR BUILDING PERMITS AND LICENSES



Example: Florida (USA)

50% reduction in the time it takes to obtain a license and building permit for buildings with sustainable certification.

Source:

<https://meridian.allenpress.com/jgb/article/3/2/46/199898/A-Climate-for-Change-Green-Building-Policies>

According to the survey applied, this initiative would have a high chance of success

What does it consist of?

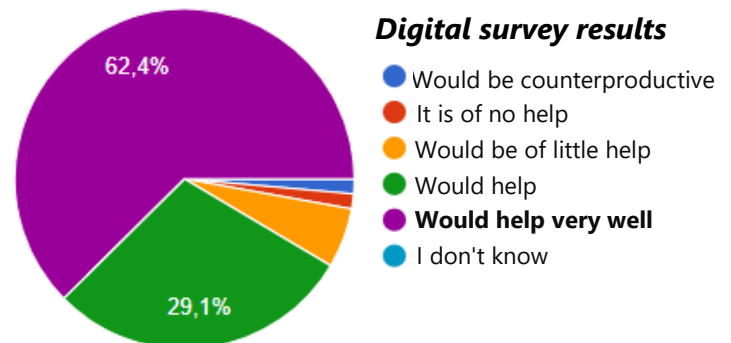
The municipal office in charge of receiving the procedures for construction projects decrees and implements the reduction of time in the processing of permits and construction licenses to attend first those projects with high energy efficiency.

Benefits

- Increased clarity, speed and better monitoring of the process.
- Priority is given to projects with high energy efficiency standards, so that the private sector finds it attractive to reduce the economic risks associated with processing times.

Recommendations

- Training of public servants.
- Linking existing national standards and codes as a prerequisite.
- Recognize independent sustainable building certification, such as LEED, EDGE, BREEAM, Passive House, or national ones like EcoCasa in Mexico.



PROCEDURE: A COMPETITION AMONG BUILDINGS TO BOOST EE EFFORTS



Example: France & intl

15% average energy savings per year in non-residential buildings through a dynamic, awareness-raising competition, that allows to work on the third pillar of energy efficiency.

Minimal participation fees in order to access the online portal, candidate resources & more!

Source:

<https://cube-challenge.org/>

What does it consist of?

Non-residential buildings in France & abroad participate in an energy & GHG savings competition, CUBE, founded & managed by the French Institute for Building Performance (IFPEB). The competition spans one year, & grants access to an online portal where candidates follow their energy savings in real time. Candidates are placed in sub-building categories in order to compare their consumption trends & energy savings among similar buildings.

Benefits

- Incentivizes concrete action on the ground to reduce consumption & achieve international targets on time
- Creates a monitoring culture of real consumption *progress* in buildings
- Increases exposure of a given organization's progress and concrete savings initiatives
- Promotes cross-departmental collaboration on a common project and objectives
- Improves owner-tenant relationships in buildings

Recommendations

- Creating a designated CUBE Team to mobilize & manage CUBE actions
- Working with occupants to adjust operations & have these reflect the real usage of a space (low investment)
- Identifying major recommissioning works needed in the building once operations have been fully optimized
- Using the competition aspect to motivate teams & organizations to save more than fellow candidates!

PROCEDURE: REDUCED TIME FOR WATER & ELECTRICITY CONNECTIONS



Example: Los Angeles, California (USA)

Acceleration of the process of connecting water and drainage services in building construction projects with sustainable certification.

Source:

<https://meridian.allenpress.com/jgb/article/3/2/46/199898/A-Climate-for-Change-Green-Building-Policies>

What does it consist of?

The state and municipal governments are in dialogue with the service operating commissions to speed up the process of connecting to the grid for projects with high energy efficiency.

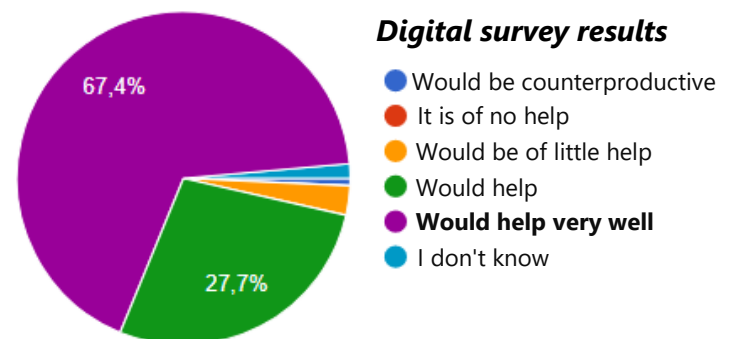
Benefits

- Increased clarity, speed and better monitoring of the process.
- Priority is given to projects with high energy efficiency standards, so that the private sector finds it attractive to reduce the economic risks associated with processing times.

Recommendations

- Training of public servants.
- Linking existing national standards and codes as a prerequisite.
- Recognize independent sustainable building certification, such as LEED, EDGE, BREEAM, Passive House, or national ones like EcoCasa in Mexico.

According to the survey applied in Mexico, this initiative would have a high chance of success.



TECHNICAL SUPPORT: TRAINING FOR CIVIL SERVANTS



Example: Mexico

The NAMA for sustainable housing implemented at national scale, provided trainings to federal and local officials to promote the concepts of energy efficiency in social housing.

Source:

<http://lossistemasdemicasa.com/uploads/pdf/medidas-indirectas-de-la-nama.pdf>

According to the survey applied in Mexico, this initiative would have a high chance of success.

What does it consist of?

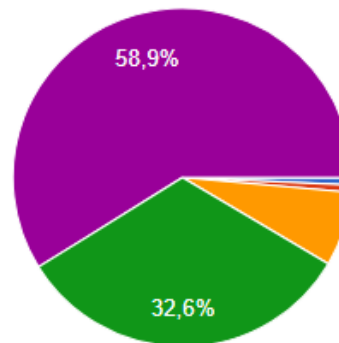
The federal government is implementing a strategy to train local officials to deal with highly energy-efficient projects.

Benefits

- The government takes a leadership role.
- The private initiative is accompanied by experts in the construction process of the project.

Recommendations

- Take advantage of supporting agencies, professional associations, academia and civil associations.
- Take advantage of the guides, manuals, technical information, digital platforms and tools available in Mexico.
- Training preferably through digital or semi-presential platforms, with the possibility of taking it at any time.



Digital survey results

- Would be counterproductive
- It is of no help
- Would be of little help
- Would help
- **Would help very well**
- I don't know

TECHNICAL SUPPORT: TECHNICAL TRAINING FOR INDUSTRY



Example: Mexico

Infonavit's *Hipoteca Verde* (Green Mortgage) for sustainable new housing mobilised the sector the most, requiring regular training for professionals from the construction and housing sectors who wanted to participate.

Source:

<https://portalmx.infonavit.org.mx/>

According to the survey applied in Mexico, this initiative would have a high chance of success.

What does it consist of?

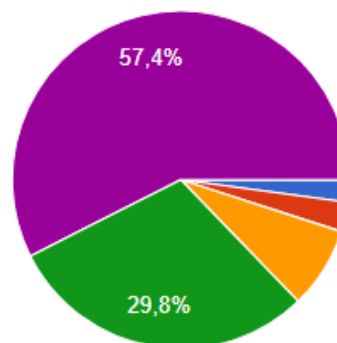
The federal government is implementing a training strategy for the private sector, to provide for projects with high energy efficiency.

Benefits

- The government takes a leadership role.
- The private sector has more arguments and freedom to create innovative solutions to be applied to building projects with high energy efficiency.

Recommendations

- Take advantage of supporting agencies, professional associations, academia and civil associations.
- Take advantage of the guides, manuals, technical information, digital platforms and tools available in Mexico.
- Training preferably through digital or semi-presential platforms, with the possibility of taking it at any time.



Digital survey results

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- It is of no help
- Would be of little help
- Would help
- **Would help very well**
- I don't know

AWARDS AND ACKNOWLEDGEMENTS



Example:

- **Mexico.** The implementation of the E4 label, allowed to see the sector and scaling up potential of the programme, focusing in the first stage on banks, offices and shops.
- **Chile.** *Huella Chile* is a programme that recognises good practices for the reduction of environmental impacts in the design and operation of industrial and commercial facilities.

Source:

<https://www.gob.mx/conuee/articulos/se-entregan-reconocimientos-a-la-excelencia-en-eficiencia-energetica-de-edificios-2018-e4>

<https://www.carbonneutral.cl/programa-huella->

What does it consist of?

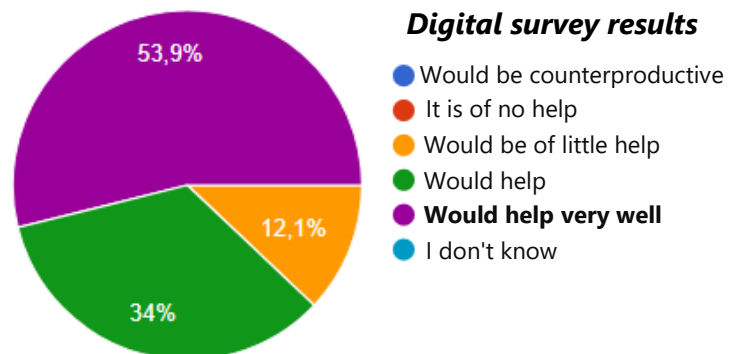
The federal/subnational government develops the guidelines or requirements that a highly efficient building should have, associated with a series of branding benefits.

Benefits

- The government takes a leadership role.
- The private sector that generates sustainable projects is recognized and benefits from the programme.
- The instrument is used for dissemination and can be scaled up gradually, year by year.

Recommendations

- Establish support links for the operation and design of the programme, with major sponsors and highly visible companies or through a leading institution in the field.
- Clear definition of the rules, the evaluation system and the scope of the label/recognition.



According to the survey applied in Mexico, this initiative would have a high chance of success.

PROJECT BONUS: HEIGHT BONUS



Example:

- **Lima, Cusco (Peru).** For constructions with EDGE certification, the building may be built one storey higher.
- **Singapur.** For constructions with national certification, it is permitted to increase 1 storey.

Source:

https://www.cusco.gob.pe/wp-content/uploads/transparencia/2019/O.M.2019/O.M.025-2019_Edificaciones%20Sostenibles.pdf

<https://www.ifc.org/wps/wcm/connect/875afb8f-de49-460e-a66a-dd2664452840/201811-CIOC-IFC-Analysis.pdf?MOD=AJPERES&CVID=mthPzYg>

What does it consist of?

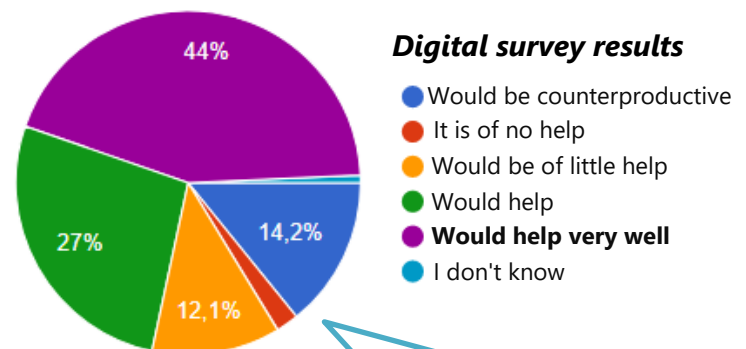
The federal/subnational government allows projects to exceed the maximum number of levels the maximum height allowed in the projected building, according to the limits set forth in regulations.

Benefits

- The private sector participates more actively in projects of this type because of their greater profitability.
- The private sector that generates sustainable projects is recognized and benefits from the programme.
- The strategy serves to disseminate and promote the regulations.

Recommendations

- Define clear rules to avoid negative effects of design decisions.



Digital survey results

- Would be counterproductive
- It is of no help
- Would be of little help
- Would help
- **Would help very well**
- I don't know

According to the survey applied in Mexico, this initiative would have a good chance of success.

PROJECT BONUS: AREA DENSITY BONUS



Examples:

- **Lima, Cusco (Peru).** An additional 15 % increase in land use is permitted for EDGE-certified buildings.
- **Delhi (India).** 1-4 % in addition to the total gross built-up area of a LEED or equivalent certified project.

Source:

<https://edgebuildings.com/market-players/governments/?lang=es#toggle-id-9>

<https://www.usgbc.org/resources/delhi-nct>

What does it consist of?

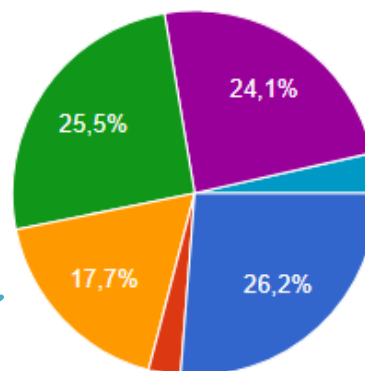
The federal/subnational government allows projects to exceed the maximum allowable density in the projected building, according to the limits established in regulations, increasing the built area from 2% to 15%.

Benefits

- The private sector participates more actively in projects of this type because of their greater profitability.
- The private sector that generates sustainable projects is recognized and benefits from the programme.
- The strategy serves to disseminate and promote the regulations.

Recommendations

- Define clear rules to avoid negative effects of design decisions.



Digital survey results

- Would be counterproductive
- It is of no help
- Would be of little help
- **Would help**
- **Would help very well**
- I don't know

According to the survey applied in Mexico, this initiative would have a good chance of success.

PROJECT BONUS: CHANGE OF LAND USE



Example: Belgrade (Serbia)

Land Capture Values. The state establishes mechanisms and tools to manage and increase the value of land for sustainable and energy efficient buildings.

Source:

<https://www.ifc.org/wps/wcm/connect/875afb8f-de49-460e-a66a-dd2664452840/201811-CIOC-IFC-Analysis.pdf?MOD=AJPERES&CVID=mthPzYg>

What does it consist of?

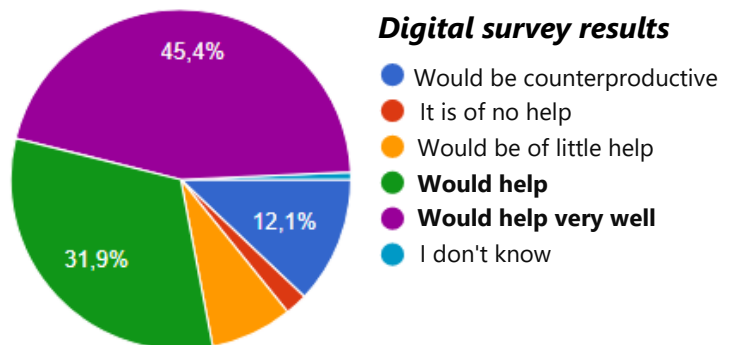
The federal/subnational government allows projects to more easily promote land use change established in the land-use plan. The state defines management tools and mechanisms for suitable land and promotes better locations for granting special permits for highly efficient construction projects.

Benefits

- The private sector participates more actively in projects of this type because of their greater profitability.
- The private sector that generates sustainable projects is recognized and benefits from the programme.
- The strategy serves to disseminate and promote the regulations.

Recommendations

- Define clear rules to avoid negative effects of design decisions.



According to the survey applied in Mexico, this initiative would have a good chance of success.

MARKET INCENTIVES: ENERGY PERFORMANCE LABELLING OF THE BUILDING



Example: Mexico

The Mexican government's *Sisevive-Ecocasa* programme has implemented a system to evaluate the energy and environmental performance of new & existing social housing.

Source:

<http://lossistemasdemicasa.com/uploads/pdf/sistema-de-evaluacion-de-la-vivienda-verde.pdf>

What does it consist of?

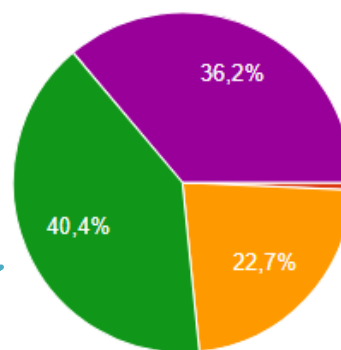
The federal/subnational government implements a strategy to issue an energy performance certificate for all new and/or existing buildings.

Benefits

- The end user has more tools to make decisions when buying or renting a property.
- The competitiveness of the industry is promoted.
- The participation of non-construction companies is promoted, establishing win-win schemes.

Recommendations

- Develop the strategy taking into account compliance with minimum national standards.
- Link this initiative to other types of incentives to amplify the benefits.
- Consider existing codes and programmes in the country for their design and implementation.



Digital survey results

- Would be counterproductive
- It is of no help
- Would be of little help
- Would help
- **Would help very well**
- I don't know

According to the survey applied in Mexico, this initiative would have a very good chance of success.

MARKET INCENTIVE: BENEFITS CARD



Example: Changwon (South Korea)

The state provides a benefit card that can be used for public and private transportation, paperwork and services.

Source:

https://c40-production-images.s3.amazonaws.com/case_studies/images/14_Changwon_20_20Carbon_20Mileage.original.pdf?1389915711

What does it consist of?

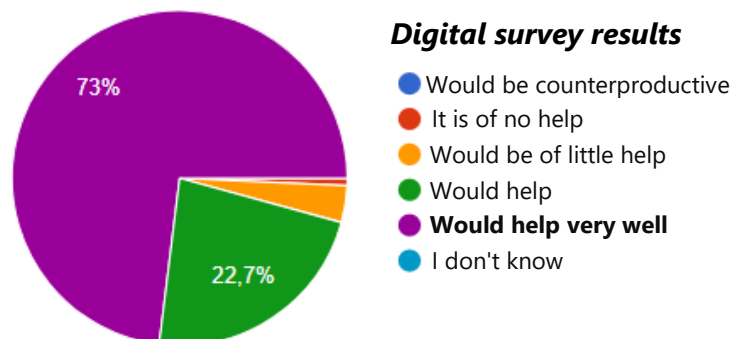
The federal/subnational government, in partnership with sponsors, implements tools to provide benefits to owners and tenants of energy efficient properties.

Benefits

- There is a greater presence of energy efficiency actions by establishing a benefits card, which can be used in services, procedures and others.
- The end user has more tools to make decisions when buying or renting a property.
- The competitiveness of the industry is promoted.
- The participation of non-construction companies is promoted, establishing win-win schemes.

Recommendations

- Develop the strategy in a coordinated manner, with clear state leadership.
- Link the benefits card to the property's environmental rating / performance, providing greater benefits based on performance.



According to the survey applied in Mexico, this initiative would have a good chance of success.

PUBLIC COORDINATION: REGULATORY AND INTER-INSTITUTIONAL MANAGEMENT



Examples:

- **Boston, (USA).** Boston Code Council - Green Credits. The state develops its sustainability guidelines and communicates them to involved actors. Projects apply from a certain area in m².
- **Merida, Yucatan (Mexico)** implements a zero-energy public buildings strategy by 2030 to show commitment.

Source:

<http://www.bostonplans.org/getattachment/76c48774-c670-4568-8e53-74931fa09fb5>

https://www.gob.mx/cms/uploads/attachment/file/170893/18_Merida.pdf

What does it consist of?

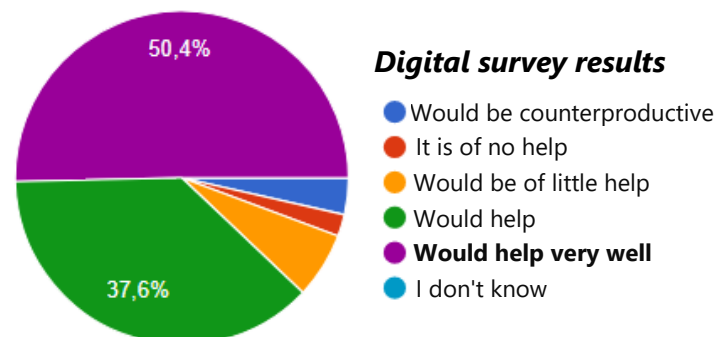
The federal/subnational government implements an inter-institutionally coordinated strategy to promote energy-efficient building projects.

Benefits

- There is an administrative, political and regulatory framework that supports the activities of all those involved in the project value chain.
- The procedures, evaluations and the whole process included in the construction activity are facilitated.
- The end user has more tools to make decisions when buying or renting a property.
- Foreign and private investment in the country is attracted.

Recommendations

- Consider the work done previously, so as not to duplicate efforts.



According to the survey applied in Mexico, this initiative would have a good chance of success.

4. Overview on non-financial incentives in different countries

GOOD PUBLIC PRACTICE OF NON-FINANCIAL INCENTIVES FOR THE PROMOTION OF ENERGY EFFICIENCY IN BUILDINGS			CASE STUDIES			Processing time	Project profitability	Process simplification	Promotion of EE	Compliance management	Degree of Replicability			Internet Link	
Type	No.	Name	Country	City / State	Initiative / Programme						Benefits				
I	PROCEDURE	1	One-stop office	USA	Washington, DC.	One-stop office for construction procedures	x	x	x	x	x	x			Link
		2	Reduced time for permits and licenses	USA	Florida, USA	50% reduction in time for permits and licenses	x	x	x	x	x	x	x		Link
		3	Reduced connection time for electricity and water	USA	Los Angeles	Reduced processing time for electricity and water connection	x	x	x	x	x	x	x		Link
II	TECHNICAL ADVICE	4	Training of civil servants	Mexico	Mexico	Mexican NAMA for sustainable housing			x	x	x		x		Link
		5	Technical training for industry	Mexico	Mexico	Green Mortgage				x	x		x		Link
		6	Free technical training	Mexico	Mexico	Webinars for Energy Efficiency in Buildings & Industry				x	x		x		Link
III	AWARDS AND ACKNOWLEDGEMENTS	7	Highly energy-efficient building labels	Mexico	Mexico City	Excellence in Energy Efficiency in Buildings (E4)				x	x	x	x		Link
		8	Best Practice Awards	Chile	Chile	Huella Chile				x	x		x	x	Link
IV	PROJECT BONDS	9	Change of land use	Serbia	Belgrado	Land Value Capture Tools - New land for builders		x		x	x		x	x	Link
		10	Height bonus	Peru	Arequipa	1 additional floor level and reduction of parking space requirements if project is certified		x		x	x		x		Link
				Peru	Lima, Cusco	1 additional floor level to the one allowed in the regulations (housing); Ordinance No. 25-2019-MPC		x		x	x		x		Link
		11	Floor Area bonus / Floor Area Ratio (FAR)	Singapur	Singapur	1 additional floor level to the one allowed in the regulations		x		x	x		x	x	Link
				India	Pune	3% / 5% / 7% extra FAR for 30% / 40% / 50% improvement in energy, water, materials							x		Link
				Peru	Lima	15% additional land use ratio; Ordinance 510/MM		x		x	x		x		Link
				Peru	Lima, Surco	25% extra FAR, 20% reduction of parking space requirements, and 20% less area per unit than the minimum required		x		x	x		x		Link
				Singapur	Singapur	2% additional to the total gross built area of the project		x		x	x		x		Link
				Japan	Tokyo	FAR		x		x	x		x		Link
				USA	California	FAR		x		x	x		x		Link
		India	Delhi	1-4% additional to the total gross built area of the project		x		x	x		x		Link		
V	PUBLIC COORDINATION	13	Management of federal/state initiatives (new and existing)	USA	New Mexico, USA	Compliance mandate for public buildings.			x	x	x	x	x	Link	
				México	Merida, Yucatan.	Compliance mandate for public buildings.			x	x	x	x	x	Link	
		14	Management of standards and codes	USA	Boston	Boston Code Building (green credits / m2)			x	x	x		x	x	Link
VI	MARKET TOOLS	15	Energy performance labelling	Mexico	Mexico	Sisevive - Ecocasa		x	x	x	x		x	Link	
		16	Benefits card	South Korea	Changwon's	Benefit card (Carbon Milleage Programme)		x	x	x	x		x	x	Link

Table 1. Good public practices of non-financial incentives for the promotion of energy efficiency in buildings.

Publisher

Programme for Energy Efficiency in Buildings (PEEB) Secretariat
c/o Agence Française de Développement (AFD)
5 Rue Roland-Barthes
75012 Paris, France
E info@peeb.build
T +33 (0) 1 53 44 35 28
I www.peeb.build

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PEEB is implemented by the Agence de l'Environnement et de la Maîtrise de l'Énergie (ADEME), AFD and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

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