

In the developing world, urban populations are the most affected by climate change due to an overlap of social and environmental vulnerabilities. Local governments often have limited resources to pursue the sustainable development goals (SDGs) agreed by the United Nations. To support the public sector to fulfil the global Agenda 2030, the Municipality of Teresina has created Agenda Teresina 2030, a hub for innovation that prototypes solutions combining open government and smart cities strategies.

TERESINA'S RECIPE

for climate action

* Ultimate smart city strategy with a fresh open government frosting

Serves

861.442 inhabitants

*Teresina's population (IBGE, 2018)

Preparation time

~ 12 years

*Agenda 2030 implementation horizon

Skill

showing off

Method

preheated oven

*+2° degrees \ rate twice as high as the average global warming, according to NASA GISS 1951-2015

Ingredients

*The resources (and challenges) we have

1 tbsp
Limited funds
low income per capita
€157,96/person
(PNUD, 2010)
low tax revenues

6 hard-working
Peoples
limited staff, with four
urban planners and
two interns

to taste
Innovation
freedom to
explore new
solutions

a large
Territorial area
1.391,981 km²
(IBGE, 2017)

4 cups
Urban population
94,27% of the
population lives in
the urban area of
Teresina
(IBGE, 2016)

extreme
Heat environment
tropical climate with
high temperatures for
most of the year
max temp: above 40°C
air humidity: 20%

1 liter
Vulnerability
Risk to Extreme Risk
Vulnerability Index for
Climate Change in
Latin America
(CAF, 2014)

Instructions

*The methodology we use

Agenda Teresina 2030 is a low cost local government approach for monitoring and achieving a more sustainable development. It consists in a **5-steps approach** that aims to indicate possibilities of creating a smart city that is knowledge-intensive (McFarlane and Soderstrom, 2017) in a scenario of scarce educational, technical and financial resources. It stresses open government as a necessary path towards a more resilient future, advancing a governance model that relies on open data and open processes, marking a transition from a paper-based to a digital-based public sector and confronting a national culture of political corruption.

1. Localize and globalize

Transfer the **6 hard-working people** to a transparent and open government bowl and leave them to marinate in some **innovation**. Use the marinated hard-working people to localize global sustainable goals and globalize local initiatives.

2. Measure what you treasure

Using an efficient smart city strategy, measure the most pressing issues regarding urban sustainability and share the open data with the **urban population**.

3. Prototype and recalculate

Meanwhile, halve the **vulnerability** by using the **limited funds** to prototype low-cost tools to face climate change, across the **large territorial area**. If needed, add more **innovation**.

4. Influence and advice

Add all ingredients inside an **extreme heat environment**, and blend until combined. Inform decision making and serve as advice to the local government, business and social action.

5. Scale and re-aplicate

Scale and re-aplicate the recipe across vulnerable metropolis of developing countries.
Serve immediately.

Tools

a transparent
Open Government

an efficient
Smart City

THERE IS NO MAGIC FORMULA.

Building urban resilience takes on multiple forms, but in its essence must seek the betterment of people.

Because of the unprecedented effects of climate change, it is no longer possible to rely solely on past experiences when planning cities. To create a resilient future, local governments must better understand rapidly changing dynamics of urbanisation and weather. Also, they should find innovative solutions that promote a long-term vision of vulnerability reduction and sustainable development. Developing countries must be not only recipient of top-down best-practices or solutions modeled for developed world problems, but also hold the potential to advance methodologies that improve urban populations lives. Agenda Teresina 2030 tests and showcase some possibilities to achieve a sustainable and resilient future in close cooperation with people, focusing on open government, open data and transparency.