

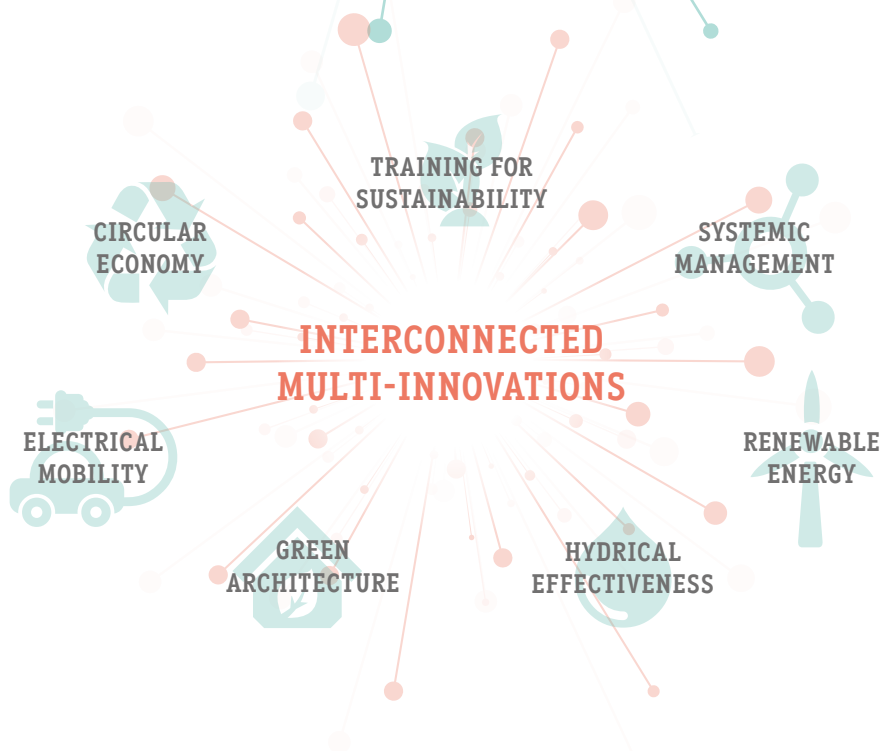
CONNECTION BRAZIL  -  UNITED STATES

RENEWABLE ENERGY

& INTERCONNECTED INNOVATIONS

New Markets of the 21st Century

Workshop, panels, business and exhibition



04, 05, 06 APRIL 2017

PAÇO ALFÂNDEGA

RECIFE - PERNAMBUCO - BRAZIL

Realização:



Renewables100
Policy Institute

Patrocínio:



Apoiadores:



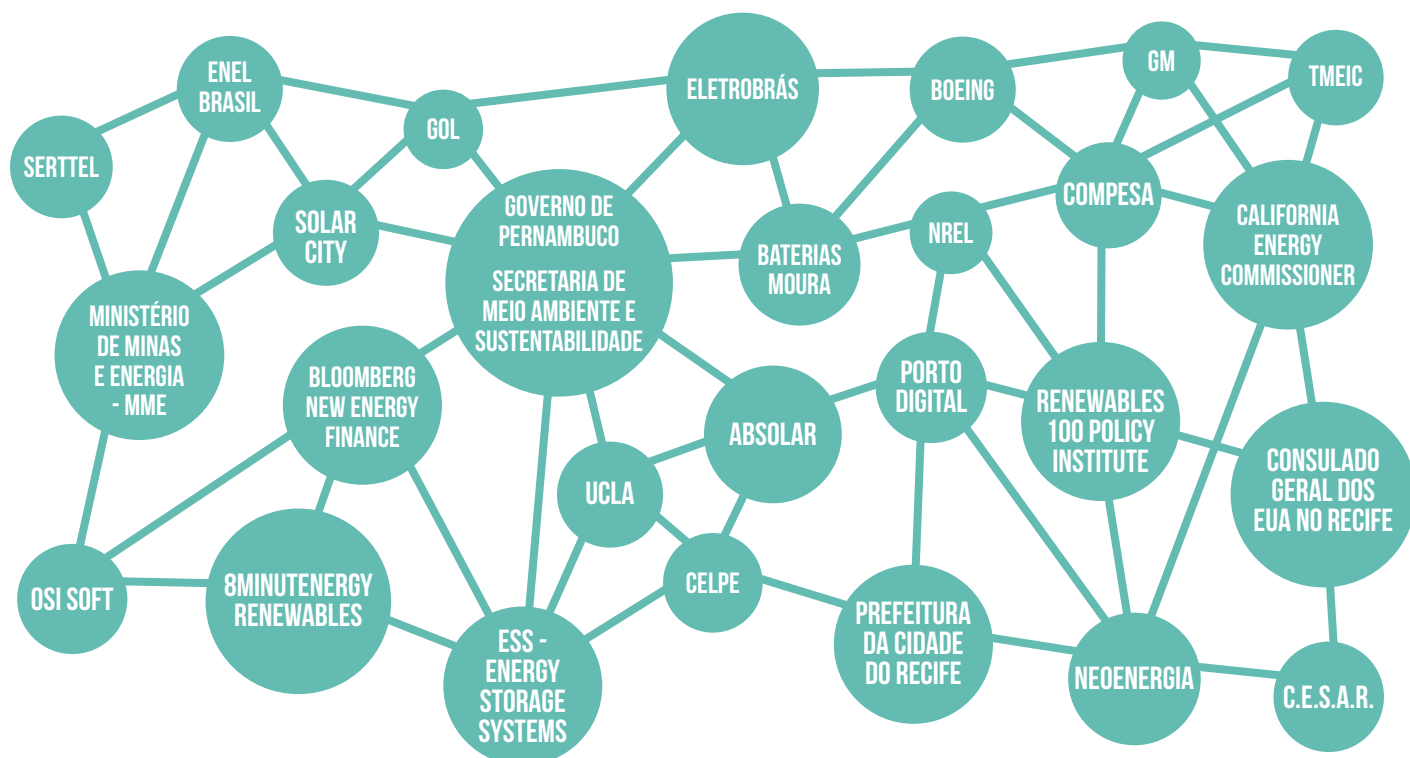
Coordenação:



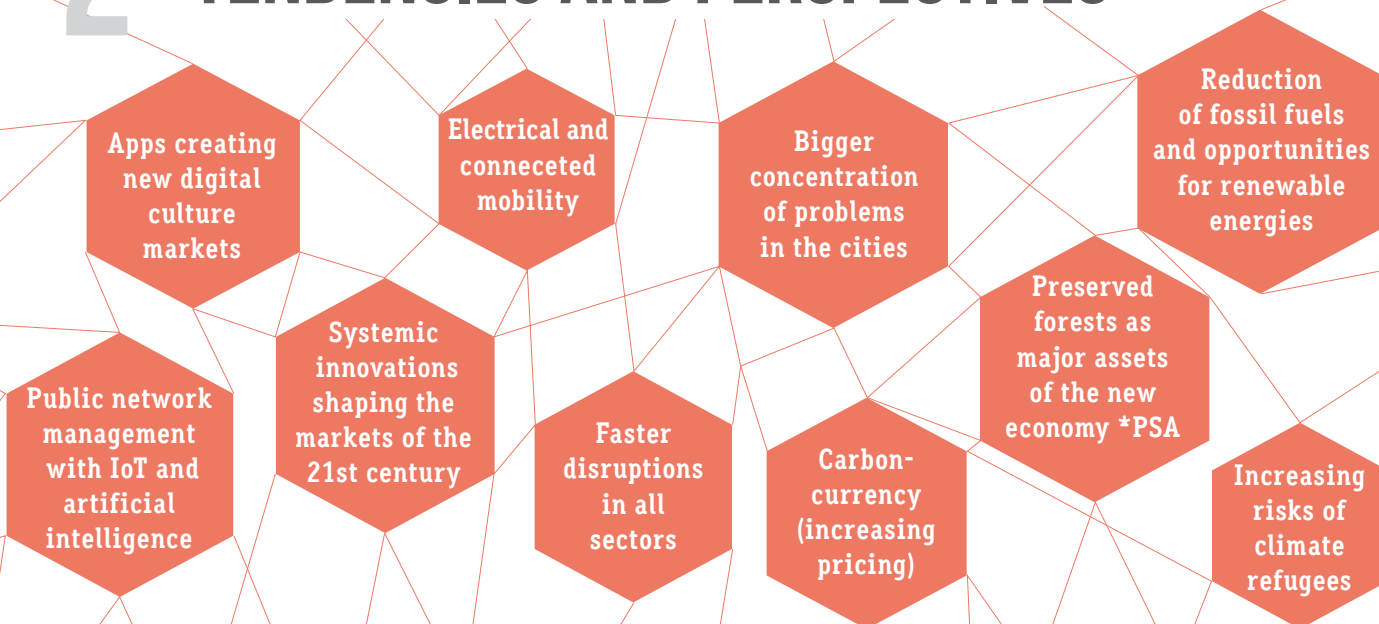


1 INTERCONNECTED BUSINESS

The Workshop **“Renewable Energy and Interconnected Innovations: New Markets of the 21st Century”**; will bring together, during 3 days, leading experts and national and international from various sectors (governments, companies, universities and non-governmental organizations) to present and debate trends, products, services, technologies and solutions to promote the **low carbon economy in Pernambuco and in Brazil**.



2 TENDENCIES AND PERSPECTIVES

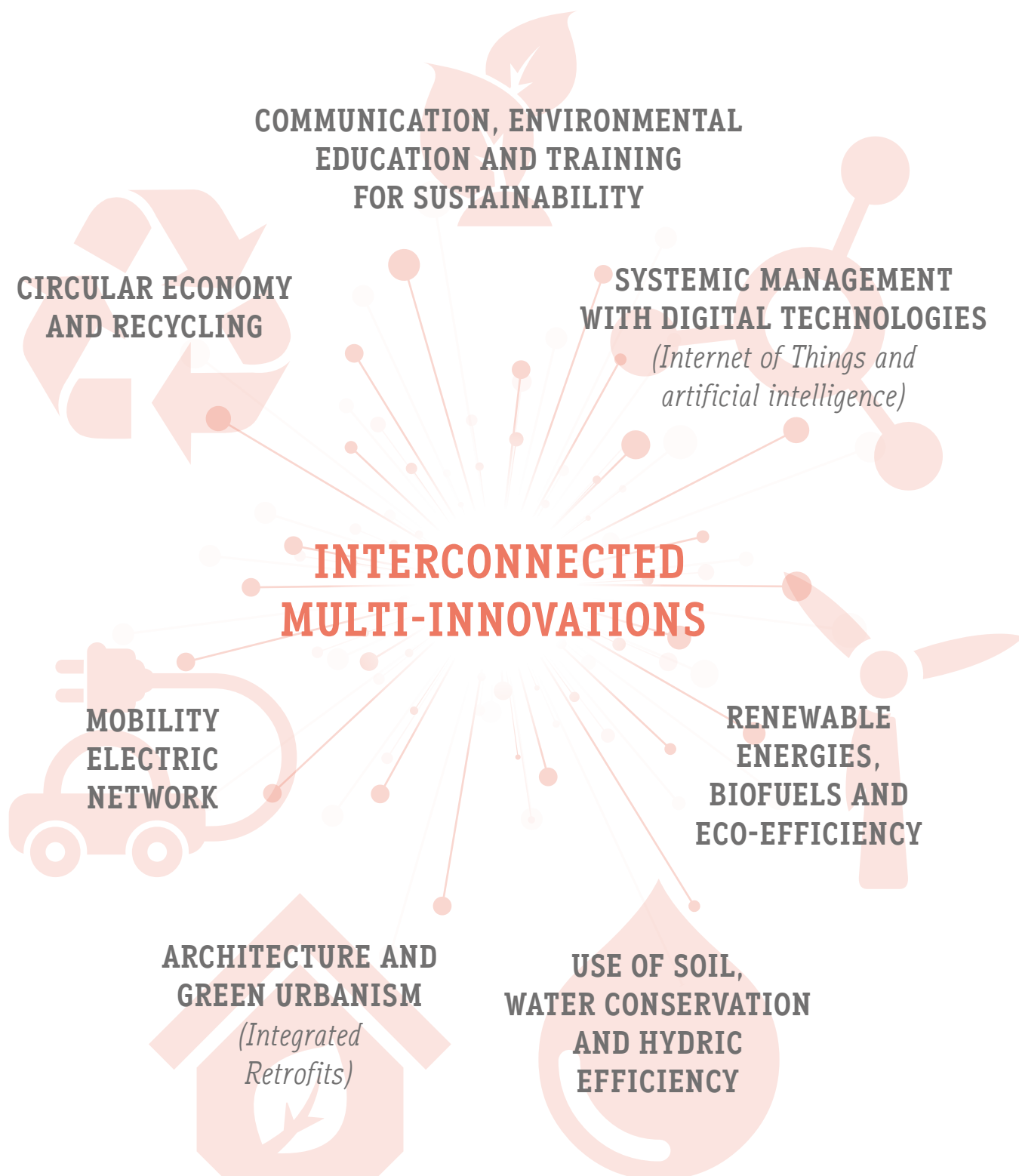


3

A NEW ECONOMY

connected, inclusive, collaborative, low carbon,

FOR A SUSTAINABLE DEVELOPMENT



4 CREATE NEW BUSINESS MODELS IN PERNAMBUCO TO THE WORLD

The partnership between the Government of Pernambuco and the Government of California (Global Climate Leadership Memorandum of Understanding - MOU) aims to exchange knowledge and ideas to promote the new low-carbon economy and contribute to the reduction of global warming. Implement an innovative model of public management and systemic policies to the island of Fernando de Noronha and other regions of the State is part of the developing new replicable businesses on a large scale. Initiatives are tuned with the Paris Agreement (COP21), which led to the creation of the **Innovation and Incentive Low Carbon Economy Comitee**, whose mission is to implement sustainable business poles in Pernambuco, beginning with Recife and Fernando de Noronha.

Diário Oficial Estado de Pernambuco

Ano XCIII • Nº 222

Poder Executivo

Recife, quarta-feira, 30 de novembro de 2016

PELA SUSTENTABILIDADE

Governo institui o Comitê de Inovação e Incentivo à Economia de Baixo Carbono

Estimular a atração de negócios inovadores e sustentáveis no Estado. Este é o objetivo do Comitê de Inovação e Incentivo à Economia de Baixo Carbono (CIIEBC). Um decreto estadual neste sentido foi assinado pelo governador Paulo Câmara na manhã de ontem (29).



Composto por 13 integrantes de órgãos e entidades da administração pública estadual, o grupo terá 60 dias, a partir da publicação da resolução, para apresentar uma estratégia efetiva para impulsionar as ações no segmento. A definição dialoga ainda com a política ambiental em vigor no Estado e com a nova proposta de desenvolvimento econômico.

O objetivo desse grupo é criar sólidas diretrizes para embasar a composição de políticas públicas voltadas para a redução da emissão de gás carbônico. Devido a sua natureza interdisciplinar, o recém-criado comitê ainda dará suporte a atividades em andamento, fortalecendo os projetos voltados ao desenvolvimento sustentável.

Coordenado pela Secretaria de Meio Ambiente e Sustentabilidade, o comitê será formado, em um prazo de 15 dias, por integrantes das secretarias de Ciência, Tecnologia e Inovação; Desenvolvi-



O PROGRAMA Noronha Carbono Zero vai transformar o arquipélago no primeiro território livre de carbono no País.

mento Econômico; Turismo, Esportes e Lazer; Planejamento e Gestão; Cultura; Procuradoria Geral do Estado; Gabinete do Governador; CPRH;

Compass; Conselho Distrital de Fernando de Noronha e Fundação de Amparo à Ciência e Tecnologia do Estado (Fapece). É vedada a remuneração de

membros desta comissão.

CARBONO ZERO - Alinhada às prioridades globais de combate às mudanças climá-

ticas, a resolução assinada por Paulo Câmara garante também a definição de novos instrumentos de gestão para o Programa Noronha Carbono

Zero - ação que visa transformar o arquipélago no primeiro território livre de carbono no País. Apresentado no ano de 2013, na gestão do governador Eduardo Campos, a iniciativa já realizou diversas ações do gênero na ilha, sendo considerado uma promessa de sucesso para o Brasil.

A partir dessa resolução, o programa sairá fortalecido, novas metas serão incorporadas e outros parceiros vão poder contribuir com os projetos. O objetivo é acelerar a criação de uma rede integrada de soluções inovadoras, atraindo a cooperação internacional ao projeto estadual. A ideia é prospectar novas empresas para desenvolverem soluções inovadoras no Arquipélago.

O objetivo do Governo do Estado é ampliar a iniciativa do Programa Noronha Carbono Zero para o Recife e municípios do semiárido, região que mais sofrerá com os impactos com o aquecimento global.

5 PIONEERING RECIFE: FIRST SYSTEM OF SHARING ELECTRIC VEHICLES IN BRAZIL (2013)

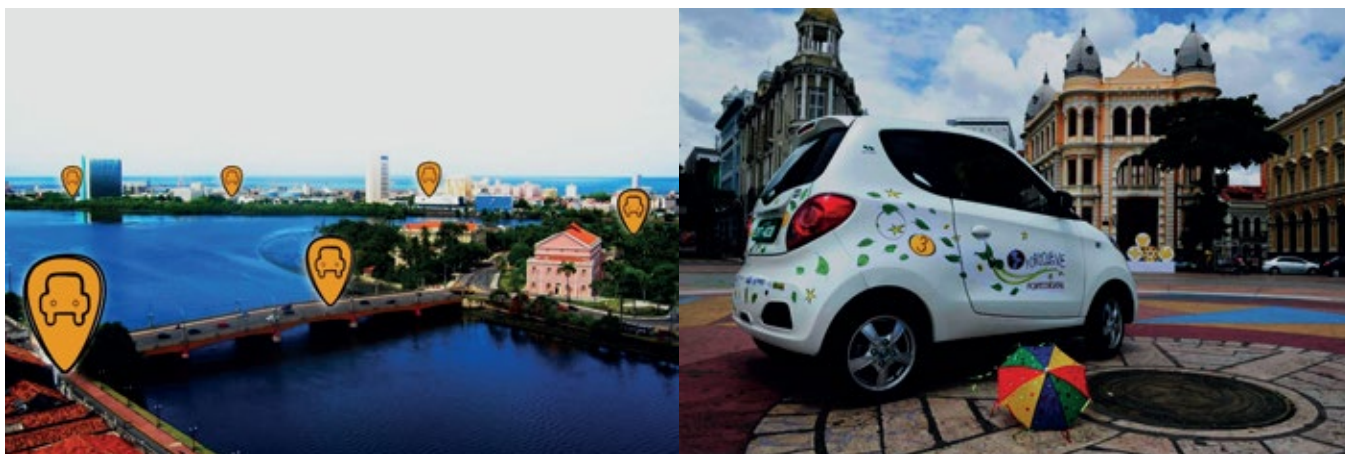
Initiative of the Environment and Sustainability Secretariat of Pernambuco - **SEMAS** in partnership with:

PORTO DIGITAL

SERTTEL

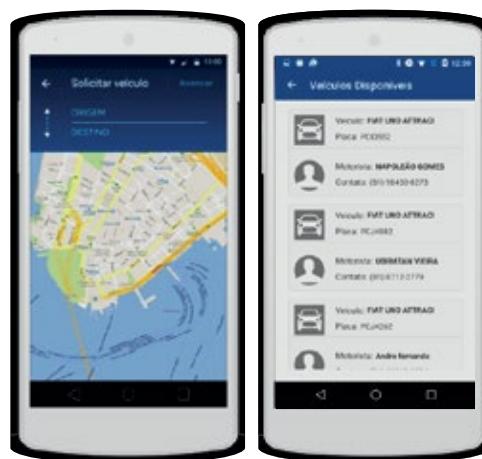
ZD - XINDAYANG

PREFEITURA DO RECIFE



6 GOVMOBI - GOVERNMENT OF PERNAMBUCO LAUNCHES FIRST BRAZILIAN APP TO SHARE GOVERNMENT VEHICLES

Created by the Environment and Sustainability Secretariat of Pernambuco in partnership with Serttel, the pioneer App GovMobi made possible the reduction of 41% of fuels and greenhouse gas emissions in 2016.



7

FERNANDO DE NORONHA ZERO CARBON (2013)

Initiative to transform Noronha into the first territory to fully compensate for greenhouse gas emissions

Already Accomplished

- ◆ Two solar power plants
- ◆ Bicycles
- ◆ Environmental education
- ◆ Improvement in water management
- ◆ Improvement in selective collection
- ◆ Improvement in environmental management ...
- ◆ 12% reduction in gas emissions (375 thousand liters of diesel/year)



- Main Island 17km²
- Environmental Protection area
- Population 4 thousand inhabitants
- Maximum Capacity 5,5 thousand
- 545 Km from Recife
- World Heritage Site (Unesco)



8 UPLANET FESTIVAL

Initiative of the Environment and Sustainability Secretariat of Pernambuco (SEMAS) in partnership with private sector companies, the **uPlanet Platform** (Festival, App and Magazine) is part of a collaborative network of innovative solutions that aims to connect people, Governments and organizations, as well as discuss, formulate and present new business models that contribute to an inclusive and sustainable economy. The 1st **UPlanet Festival** took place in November 2016, in Recife, and brought together over four days more than 50 national and international specialists, as well as important artists such as Deborah Colker, Lia de Itamaracá and Isaar. The 2nd edition is scheduled for June 2017.



Cláudio Assis, Luciano Siqueira, Deborah Colker, Richard Reiter, Sergio Xavier e Maria Luciana Nunes



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INNOVATION AND RENEWABLE ENERGY MAKES US MOVE TO THE FUTURE

By **Paulo Câmara**, *Governor of the State of Pernambuco*



I would like to welcome the participants of the meeting **“Renewable Energy and Interconnected Innovations: New Markets of the 21st Century”**. Our Government, in partnership with the US Consulate General for the Northeast, is proud to promote this meeting of idealistic entrepreneurs, who, I am sure, will leave promising seeds.

We work with enthusiasm to position Pernambuco always in the vanguard, in the construction of the low carbon economy. We are making progress, not only as a State that generates clean energy, but also as a productive pole of equipment, technologies and knowledge in renewable energies.

In addition to the wind power generation park, the State already has the most complete wind farm equipment manufacturer in Brazil, located in the Suape Port Industrial Complex, with large logistics capacity.

Pernambuco has a gross potential of 1,000 GW of wind energy and about 5,200 GW of solar energy. To take advantage of these sources, the government created the Sustainable PE Program and held, in 2013, Brazil's first solar energy auction of 92 Megawatts (MW).

As a result of this pioneering activity, it was inaugurated in 2015 in the municipality of Tacaratu, with investments by Enel Green Power, the country's first hybrid park, with a 10 MW solar plant, integrated with an 80 MW wind plant. Together, they are able to supply 250 thousand homes. Other photovoltaic plants of several entrepreneurs are in installation, in addition to a factory of solar panels.

The wind and solar parks installed have already reduced hundreds of thousands of tonnes of global warming gas emissions.

In order to encourage solar energy generation, the Solar PE program was created with a specific financing line and we extended fiscal benefits for internal, interstate and import purchases of machines, appliances and equipment for the component industries and wind and solar parks.

To boost and strengthen this new market, the government of the State created a solar energy marketer and in 2016 began to buy energy for public buildings via the Free Market.

To advance in this way, we created the Committee of Innovation and Incentive to the Economy of Low Carbon - CIIEBC, coordinated by the Secretary of Environment and Sustainability, to formulate and implant innovative policies, in line with the new paradigms of the sustainability. Having said that, I can say that Pernambuco is prepared to take even more bold steps, adding the ideas and proposals resulting from this historic meeting.

Sustainable Development, which has the use of clean and renewable energy as one of its pillars, is what we want for Pernambuco, for Brazil and for the World.

UNITED STATES – BRAZIL: PARTNERSHIP IN RENEWABLE ENERGY

By **Richard Reiter**, *Consul General of the United States in Recife*



The Consulate General of the United States in Recife is one of the oldest Diplomatic posts in the United States, with more than 200 years of operation. The first American diplomat, Samuel Voorhees, arrived in Recife in 1815, even before Brazil became an independent nation. The United States was attracted by the commercial opportunities that existed in Pernambuco - mainly sugar and cotton, at the time.

Two centuries later much have changed in the world, but the importance of our relationship remains. Brazil and the United States are the two largest economies in the Western Hemisphere. Last year, we negotiated U\$ 46 billion, and Pernambuco continues to play an important role in our business partnership. But as our economies evolved, our trade patterns have evolved and that is why we are extremely proud to partnership with Pernambuco in the renewable energy sector - a field in which the state is a leader.

The Consulate General of the United States is excited to organize, together with the Secretariat of Environment and Sustainability of Pernambuco (SEMAS) and Renewables 100 Policy Institute, the workshop **“Energy and Interconnected Innovations: New Markets of the 21st Century”**; from 04 to 06 April. This event is funded partially by a U\$ 75,000 grant from the US government that seeks to leverage public-private partnerships, bringing together the government and the private sector to find solutions to the most difficult challenges. The objective of the event is to generate commercial projects between US and Brazilian companies and institutions that will meet the needs of an evolving energy sector in which, in 2015, US \$ 290 billion has been invested in the renewable energy sector worldwide. Solar energy also generates several jobs in the US. According to the United States Department of Energy, the solar energy department alone employs about 375,000 people in the country.

The workshop is attended by seven US renewable energy companies, including the US Department of Energy’s National Renewable Energy Laboratory; University of California in Los Angeles; California Independent System Operator (CAISO); The California Energy Commission. This interest of high-level US institutions, both public and private, is an indication of the potential for Brazilian participation in this field, both as a global leader and as a commercial market. The US Consulate General is enthusiastic to support this work.

The workshop will also launch the Pernambuco project “Noronha Carbon Zero”;. Americans and Brazilians specialists will work together to build a plan of action that will transform Fernando de Noronha into an island that generates 100% of its energy from renewable sources and low emission of carbon. This means that the island’s natural beauty will be protected and that the project will serve as a clean technology model that can be used around the world.

The collaboration of the Consulate General of the United States with Pernambuco is an old commitment. Americans and Brazilians have been working together in Northeast Brazil for two centuries. We are confident that the workshop will help launch more than 200 years of mutually beneficial trade cooperation.

CO-INVENTING A SUSTAINABLE ECONOMY

Por **Sérgio Xavier**, *Secretary of Environment and Sustainability of Pernambuco*



The international meeting “**Renewable Energy and Interconnected Innovations: New Markets of the 21st Century**”; is an effective leap forward in building a new economy that will propel civilization towards a model of a local and global sustainable development. For three days, experts, innovators, entrepreneurs, investors and public managers will exchange ideas, knowledge and experiences, aiming to formulate new business models and stimulate interconnections between key production chains.

In order to make this economy of the future happens, we understand that it is necessary to encourage and interconnect, in a broad, planned and simultaneous way, seven productive chains essential for sustainability: Renewable Energies and Eco-efficiency; Electric and Shared Mobility; Circular Economy and Recycling; Soil use and water conservation; Bio Architecture and Green Urbanism; Environmental Education and Professionalism for Sustainability and Systemic Management with Digital Technologies (Internet of Things and Artificial Intelligence in Network to manage complex interconnected processes). These intertwined axes will certainly have the power to change perceptions and behaviours, pulling all other sectors of the economy to a new sustainable course. We believe that it is thus possible to heat the economy, cooling down the planet and reversing polluting processes.

This inspiring meeting will sharpen our insights and ensure concrete outcomes from unprecedented multisectoral partnerships and subsidies to formulate disruptive public policies. We immediately want to grow the economy, create jobs, reduce inequalities and, simultaneously, build new productive processes fully in tune with innovation, sustainability and a sustainable vision for the future. With so many brilliant and creative minds, of the most diverse specialties, adding solutions here in Recife, I have no doubt that the results will be fast and impressive.

We are convinced that the strategy to make real-life development happen, in addition to requiring incentives for the seven productive chains already highlighted, also requires interconnected actions of five essential bases of society: Citizenship (society demanding an economy based on healthy and ecological products); Public Policies (innovative management of governments); Entrepreneurship (disruptive actions by companies); Knowledge (Research and scientific orientations) and Art (artists inspiring changes of perception and attitudes).

We are considering this in all our initiatives. The **uPlanet Movement**, launched last November with four days of action in the streets of Recife, bringing together artists, entrepreneurs, public managers, activists and researchers is a practical example of the application of this concept.

The partnership between the Government of Pernambuco and the Consulate General of the United States in Recife and with the Government of California (MOU Global Climate Leadership signed by governors Paulo Câmara and Jerry Brown) creates strong institutional bases to encourage national and international entrepreneurs to invest in these new markets with safety.

Together with you and countless partners, we are co-inventing a sustainable future.

U.S. AND BRAZIL COLLABORATING TO ACCELERATE 21ST CENTURY ENERGY SOLUTIONS

Por: **Diane Moss**, Founding Director, Renewables
100 Policy Institute, e **Angelina Galiteva**, Founding Board Chair,
Renewables 100 Policy Institute



“Innovative Energy Solutions: New Markets for the 21st Century” will bring together top energy U.S. and Brazilian experts to share insights on how the two nations can continue collaboration towards the common goal of transforming our energy systems to run on renewable, sustainable resources.

In addition to hosting a discussion on state of the art energy solutions, the event will kick off an energy transformation project between the U.S. and Pernambuco on the island of Fernando de Noronha, a World Heritage Site off the coast of Recife. This ambitious project aims to become the first demonstration in Brazil, and among the first in Latin America, of how to transform a region’s energy supply from one reliant on imported fossil fuels to one reliant on 100% local renewable energy.

Underscoring how timely this is, island nations make up more than a third of signatories to the Climate Vulnerable Forum pledge to target 100% renewable energy announced at the COP 22 last November. Success – and lessons learned along the way - on Fernando de Noronha can help ensure that the visionary energy goals of these many pioneering nations translate into tangible achievements.

This undertaking will build on research conducted by the U.S. Department of Energy’s National Renewable Energy Laboratory (NREL) in 2010 which examined ways that the island could manage water and energy supplies more sustainably. Adam Warren, Ph.D of NREL, who will be joining the April forum, says: “We look forward to working with Brazil as they pursue 100% clean energy on Fernando de Noronha. Islands provide unique opportunities to demonstrate that high-penetration renewable energy is possible without negatively affecting grid stability or increasing electricity costs.”

The project also leverages the state of California-Pernambuco partnership established by the Under 2 MOU, a global agreement of subnational governments spearheaded by the Renewables 100 Policy Institute and California to reduce carbon emission through clean energy investments. California Energy Commissioner David Hochschild is among the state’s energy officials who participated in this partnership with Pernambuco over the past year. He will be speaking at the April event about regulatory and policy frameworks for advancing renewables and energy efficiency and is hopeful about this next phase of exchange. “California is committed to building a clean energy future and looks forward to collaborating with countries like Brazil to reduce greenhouse gas pollution and advance the clean technologies that will power the 21st century”;

PROGRAMMING

RENEWABLE ENERGY AND INTERCONNECTED INNOVATIONS NEW MARKETS OF THE 21ST CENTURY

APRIL 4

8:30 – 9:00

Registration and Welcome Coffee

9:00 – 9:30

Opening and welcome by Paulo Câmara, governor of Pernambuco;
Geraldo Júlio, mayor of Recife; **Richard Reiter**, US Consul General for the Northeast;
Sérgio Xavier, Secretary of Environment and Sustainability of Pernambuco

9:30 – 9:50

Mount Signal Solar Plant Innovative Project | *8minutenergy*

Renewables Optimization Model for Solar Energy Projects

Pablo Otin – Vice President, *8minutenergy* Renewables

9:50 – 10:10

Photovoltaic Solar Power Generation in Hawaii | *TMEIC Photovoltaic*

inverters with prevention of damage caused by the sea air

Donn Samsa – General Manager, *TMEIC*

10:10 – 10:30

Maintaining Network Stability with Font Integration Renewable

Energy Variables | *OSIoft's PI system IoT platform for the "big data" collection of renewable energies*

Fábio Santos – Account Manager, *OSISoft*

10:30 – 10:50

Long-Term Energy Storage: Flexible, Safe and Low Cost | *Energy*

Storage Systems (ESS) Iron Flow Battery

Richard Phillips – Manager, *Energy Storage Systems*

10:50 – 12:00

Renewable Energy and the Impact on the Grid

David Hochschild – California Energy Commissioner

Angelina Galiteva – Councilor of CAISO

Daniel Vieira – Regulatory Expert at ANEEL

Rodrigo Sauaia – President ABSOLAR

Guilherme Syrkis – Ministry of Mines and Energy

12:00 – 14:00

Lunch Break

APRIL 4 (CONTINUATION)

14:00 – 17:00

Business Roundtable

14:30 – 15:30

IoT and Innovative Business Opportunities

Francisco Saboya – CEO Porto Digital

Sergio Cavalcante – CEO C.E.S.A.R

15:30 – 16:10

Recife for a low carbon economy

Bruno Schwambach – Secretary for Sustainable Development and Environment of Recife

Sérgio Xavier – Secretary of Environment and Sustainability of Pernambuco

17:30 – 19:30

Happy Hour

APRIL 5

9:00 – 9:20

Second day opening - United States - Brazil partnership

Paloma Gonzalez – U.S. Consulate of Political and Economic Affairs

Angelina Galiteva – Renewables 100 Policy Institute

9:20 - 10:00

Fernando de Noronha FutureCity: A model of sustainable development for the world

Sérgio Xavier – Secretary of Environment of Pernambuco

Luis Eduardo – Administrator of Fernando de Noronha

Ailton Junior – President of the District Council of Fernando de Noronha

10:00 – 10:15

Break

10:15 – 11:30

Renewable Energies and Microgrids

Angelina Galiteva - Councilor of CAISO

Adam Warren - Chief Engineer - NREL

Antônio Carlos Sanches - President – CELPE

APRIL 5 (CONTINUATION)

11:30 – 12:30

Energy Efficiency

David Hochschild - California Energy Commissioner

Ana Mascarenhas - Manager of Energy Efficiency - Neoenergia

Renata Leite Falcão - Superintendent – Eletrobras

12:30 – 14:00

Lunch Break

14:00 – 15:15

Power Storage

Kelly Desy – Project Manager - Solar City / Tesla

Spartacus Pedrosa – Director - Baterias Moura Institute of Technology

15:15 – 16:30

Case Study of a 100% Renewable Energy Business

Gláucia Roveri – Energy Manager - GM

Mike Lu – President - CURCAS

Darrin L. Morgan – Boeing Director

16:30 – 17:00

Conclusions

17:00 – 19:00

Pernambucano Happy Hour

APRIL 6

9:00 – 9:20

Public policies for renewable energy

Eduardo Azevedo - Secretary of Planning and Energy Development of MME

9:20 – 10:05

Innovative Business Models to achieve the 100% goal of Renewable energy

Angelo Bellelis - President of the AMCHAM Energy Committee and Bellelis & Cia owner

Bruno Cecchetti - Head of Market Innovation, Research and Development - ENEL BRASIL

10:05 – 10:20

Break

APRIL 6 (CONTINUAÇÃO)

10:20 – 11:15

Water and Renewable Energy

Mark Gold - Vice Rector for Environment and Sustainability - UCLA - University of California - Los Angeles

Roberto Tavares - President - COMPESA

11:15 – 12:10

Transportation with Zero CO2 Emissions

Flavio Hernandez - GM Manager

Pedro Scorza - Director - GOL Empresas Aéreas

Angelo Leite - President - Serttel

12:10 – 12:30

Closing of the General Program

John M. Andersen - Assistant Sub Secretary of Commerce for the Western Hemisphere - Department of Commerce of the United States of America

PROGRAM ON WORKING GROUPS FOCUSED ON THE FERNANDO DE NORONHA PROJECT 100% RENEWABLE - ((LIMITED PARTICIPATION))

14:00 – 14:15

Working Groups Preparation

14:15 – 15:30

Working Groups

Participants will split in six groups to discuss the following topics:

1. Technologies and Renewable Energies
2. Energy Storage
3. Transportation with Zero Emission of CO2
4. Microgrids and Efficiency
5. Water and Effluents
6. Circular Economy and Recycling

Each group will identify the challenges and elaborate recommendations for technologies, government policies and financing mechanisms for the Fernando de Noronha project and for Brazil.

15:30 - 16:30

Working Groups Presentations

16:30 – 17:00

Closing of Working Groups and Next Steps

SPEAKERS

During three days, representatives of leading national and international companies and institutions will meet to present, discuss and encourage the creation of innovative arrangements, fostering a new low carbon and interconnected economy, in addition to proposing solutions for the sector. Meet the experts who will talk about the innovations for this market.

Adam Warren is group manager for the Project Development and Finance team at the US Department of Energy's National Renewable Energy Laboratory (NREL). The team helps government agencies, utilities, corporations, and other organizations meet ambitious clean energy goals. Prior to joining NREL, Adam supported PepsiCo's efforts to reduce greenhouse gas emissions and water use in North America. Adam holds PhD and B.S. degrees in Chemical Engineering and is an adjunct professor at Colorado School of Mines.



Ana Christina Romano Mascarenhas holds a degree in Architecture by the Federal University of Bahia and a Master's Degree in Energy Industry Regulation by the University of Salvador. She is currently the Noenergia Group Energy Efficiency Manager.



Angelina Galiteva is a renewable energy expert with utility as well as distributed energy project development expertise. She is a member of the Board of Governors of the California Independent System Operator Corporation, Chairperson for the World Council for Renewable Energy, and founder of the Renewables 100 Policy Institute. She holds a J.D. and LLM from Pace University School of Law in NYC, specializing in Environmental and Energy Law.



Angelo Bellelis, managing partner at BELLELIS & Cia Consultoria and President of the AMCHAM Recife Energy Committee, coordinates the Interconnected Electric Mobility Platform for PE. Electrical Engineer, MBA with specializations by KELLOGG and INSEAD. He was president of Estaleiro Atlântico Sul and previously director of ABB, ALSTOM and Sulzer in São Paulo.



Angelo Leite is the CEO of Serttel, a Pernambuco Innovative solutions for the mobility, comfort and safety of people in urban environments company. He holds a diploma of electrical engineer by the Federal University of Pernambuco.





Antonio Carlos Sanches graduated in Electrical Engineering, postgraduate in Administration, with Executive MBA, Master in Engineering of Production and systems and doctorate in Supply Chain by UNICAMP. He is currently the CEO of Companhia Energética de Pernambuco - CELPE, of the Neoenergia Group.



Bruno Cecchetti holds a degree in Industrial Engineering from the Federal University of Rio de Janeiro, with an MBA in Business Administration from the IBMEC Business School. Is director of Innovation at Enel Brasil.



Bruno Schwambach, Secretary for Sustainable Development and Environment, holds a degree in Economics by the Federal University of Pernambuco (UFPE). Researcher at the International Car Distribution Program between 1997 and 2001, he advised Autonation USA (Fortlauderdale, FL), the largest group of dealerships in the world in 1999. He has worked in event promotion and has worked for Grupo Parvi for 25 years. Created the Parvi Institute Of Social Development.



David Hochschild has served on the five-member California Energy Commission since 2013. In 2001, he launched a citywide \$100 million initiative to put solar panels on public buildings in San Francisco. He is co-founder of the Vote Solar Initiative, a 60,000-member advocacy organization promoting solar policies. In 2007-2008, he served as a commissioner at the San Francisco Public Utilities Commission. Commissioner Hochschild holds a B.A. degree from Swarthmore College and a Masters of Public Policy degree from Harvard's Kennedy School of Government and was a Coro Fellow in Public Affairs.



Since 2011, **Donn Samsa** has led the growth of TMEIC's PV Inverter business from its beginning to almost 3GW installed across the USA. An electrical engineer by training, his career has specialized in power electronics for industrial applications with over 37 years' experience with GE and now TMEIC. Donn holds a Bachelor of Science in Electrical Engineering from Cleveland State University and a Masters in Computer Science from Virginia Tech.

Eduardo Azevedo holds a degree in Electrical Engineering and a Master's degree in Production Engineering by the Federal University of Pernambuco and a post-graduate degree in Energy Commercialization by the University of Pernambuco (UPE). He was Executive Secretary of Energy of Pernambuco and currently Secretary of Planning and Energy Development of the Ministry of Mines and Energy.



Fábio Santos holds an Industry Automation MBA degree, and a Chemistry and Computer Science undergrad degree. 19 years' experience regarding real time operational data infrastructure implementation, on customers of power & gas, pulp & paper and chemistry areas in Latin America, North America and Asia.

Flávio Hernandes Miguel is an electrical engineer graduated from the Mauá Engineering School and has a MBA degree in business management from Getúlio Vargas University. He has 23 years of experience in the automotive industry, and has worked at General Motors for 19 years, including the Europe division. He was a global leader in the development of charging system components and currently is the Product Engineering Manager.



Francisco Saboya is graduated in Economics and has a Master degree in Production Engineering from Pernambuco Federal University. He is the Porto Digital Technology Park CEO. He is the president of Latin America Division of IASP - International Association of Science Parks, and Coordinator of the Brazilian Chamber of Information Technology. He is a professor at Pernambuco State University. He was Secretary of Development of Cabo de Santo Agostinho and Commercial Director of Pernambuco Tourism Agency.

Geraldo Julio is re-elected mayor of Recife. He holds a B.A., with specialization in Public Management by the University of Pernambuco and is a public employee at the State Court of Accounts. He was Secretary of Planning and Management and Secretary of Economic Development of Pernambuco and was also president of the SUAPE Port Industrial Complex.





John Andersen is Deputy Assistant Secretary for Global Markets at US Department of Commerce. Mr. Andersen was the Principal Deputy Assistant Secretary for the Market Access and Compliance unit. He also served as Senior Director for Western Hemisphere Affairs in the former Market Access and Compliance unit in the International Trade Administration and was a key member of the President's Commission for Assistance to a Free Cuba. Mr. Andersen has a Masters of Public Affairs from the LBJ School of Public Affairs, the University of Texas at Austin and a BA in history from the University of Texas at San Antonio.



Maria Luciana Nunes, journalist and entrepreneur, is the director and curator of the platform uPlanet, a collaborative network of innovative sustainable solutions that connects people, companies and governments. She also manages Sinspire - a creative network of innovation, technology, design, sustainability and social entrepreneurship. - responsible for the collaborative production of the 1st Workshop "**Renewable Energy and Interconnected Innovations: New Markets of the 21st Century**".



Mark Gold is the Associate Vice Chancellor for Environment and Sustainability at the University of California, Los Angeles (UCLA). His research focuses on integrated water management, coastal resource management, and urban sustainability. He is spearheading UCLA's first ever Grand Challenge: Thriving in a Hotter Los Angeles by 2050: a Path to 100% Renewable Energy, 100% Local Water and Enhance Ecosystem and Human Health. Prior to working at UCLA, Mark was the President of the environmental group, Heal the Bay, for 18 years.



Mike Lu Biologist and business administrator, CEO of Curcas Diesel Brasil, Executive Secretary of the MacauBR Consortium, and private sector coordinator of the Bioquerosene and Renewables Mining Platform, Integrator of the Brazilian of Biofuels and Renewables Platform, collaborate in the structuring of the Platform Pernambucana of Bioquerosene and Renewables.



Pablo Otin has developed over 2+ GW of renewable projects in EU, U.S., Latin America and Asia and pioneered development of solar PV projects in Mexico, Puerto Rico and Panama. He has held senior roles in manufacturing companies (Gamesa), solar development firms (Gestamp Solar & BP Alternative Energy), and financial institutions (ALLCO, Foresight, LightBeam). 8minutenergy is the largest independent solar PV developer in the I.S., with over 1.5 GW under contract, and operations in India, Bangladesh, Brazil and Mexico.

Paloma Gonzalez is a career diplomat with the U.S. State Department, currently serving as the Political/Economic Chief for the U.S. Consulate General in Recife. She has helped advance collaboration in the area of renewable energy and climate change with Northeast Brazil. Prior to Recife, she was a Staff Assistant for the Assistant Secretary of Western Hemisphere Affairs. She has also served in Bogota, Colombia, and Tijuana, Mexico. Paloma has a B.A. in International Affairs from Lewis & Clark College and a M.S. in Foreign Service from Georgetown University.



Paulo Câmara is the governor of Pernambuco. He holds a bachelor's degree in Economics, with postgraduate studies in Accounting and Governmental Control and Master in Public Management (2006), all by UFPE. He is Auditor of Public Accounts of the Court of Accounts of the State of Pernambuco (TCE-PE) and was secretary of the Treasury.



Pedro Rodrigo Scorza graduated in Business Administration from PUC-RS (Catholic University of Rio Grande do Sul) and a Master's degree in Business Administration by UFRGS (University of Rio Grande do Sul). Line Pilot at GOL Airlines. Director of Renewables for Aviation of Ubrabio (Brazilian Union of Biodiesel and Bioquero).



Richard Phillips has a BS in Chemical Engineering from Oregon State University and a graduate degree in Business Administration from Syracuse University Maxwell School of Business. He began his career as an Application Engineer followed by Marketing Manager and Marketing Director at Texas Instruments, Inc. He also spent eight years as Director of Sales and Marketing and then Vice President of Sales, and Vice President- General Manager at Planar Systems, Inc. Prior to joining Energy Storage Systems he spent fifteen years as President of Lissajy Services, Inc.



Richard Reiter is a career Foreign Service Officer with the U.S. State Department. He takes up his duties as Consul General in Recife. Mr. Reiter was Special Advisor for South and Central Asia to Vice President Joseph Biden. He served a diplomatic fellowship at Columbia University in New York City. Mr. Reiter has previously served as a diplomat in Recife, Brasília, Canada, Croatia, Belgium, Afghanistan, Portugal, and at the U.S. State Department in Washington DC. He studied at Columbia University, earning a B.A. in Economics and a M.I.A. at the School of International and Public Affairs.





Roberto Cavalcanti Tavares is a graduate of FCAP / UPE and holds a Master's degree in Business Administration from the Autonomous University of Madrid / Spain. He is the president of the Brazilian Association of State Sanitation Companies - Aesbe and president of Companhia Pernambucana de Saneamento - Compesa.

Rodrigo Sauaia holds a PhD degree in Material Engineering and Technology from the Pontifical Catholic University of Rio Grande do Sul, a master's degree in Renewable Energy with specialization in Photovoltaic Solar Energy and a bachelor's degree in Chemistry from the University of São Paulo. He is the president of the Brazilian Solar Photovoltaic Energy Association (ABSOLAR). He is a co-founder and member of the Global Solar Council (GSC), and is a consultant for the field of photovoltaic solar energy with Greenpeace Brazil.



Sérgio Cavalcante holds a PhD degree in Electronics from Newcastle University - UK. He is the CESAR CEO and chairman of AmCham Recife, Pitang and Joy Street. He also participates as Porto Digital board member. He was Director of Business Relation at the Brazilian Computer Society and Head of the Department of Computer Science at the Pernambuco Federal University Technology Center, where he is a professor.

Sérgio Xavier is the developer of innovative Green Economy projects and activist for sustainable development. With a background in Social Communication and Electronic Engineering, he has been an entrepreneur of technological innovation since the foundation of Porto Digital (Recife). Licensed for business activities, he is Secretary of Environment and Sustainability of Pernambuco (SEMAS). In 2016, invited by the United States Government, Xavier participated in the International Visitor Leadership Program in California, Georgia and in Washington. He is the coordinator of the Innovation and Incentive Committee for the Low Carbon Economy, a pioneer initiative of the government of Pernambuco.

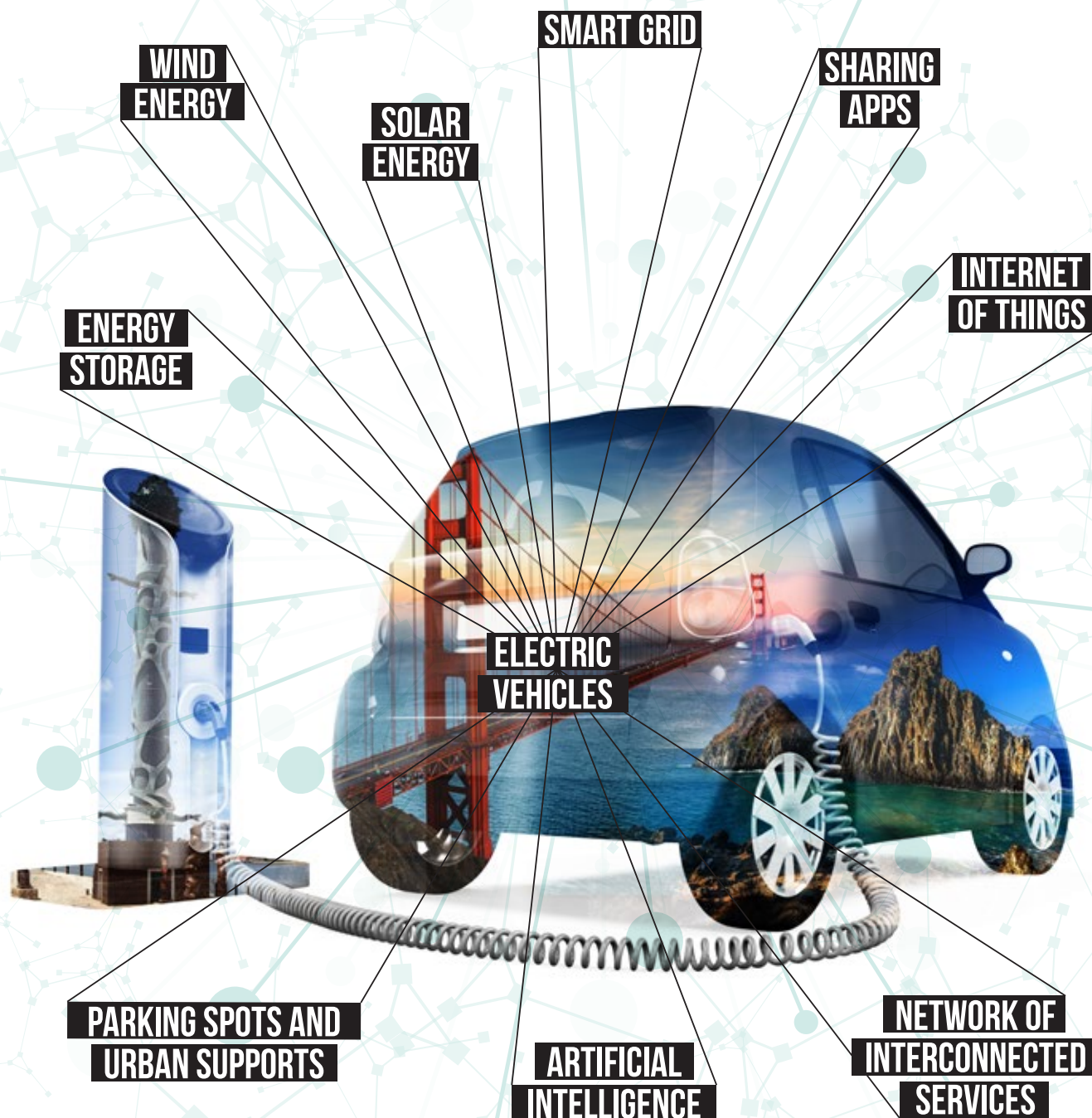


Spartacus Pedrosa holds a degree in Chemical Engineering and Business Management by the Federal University of Pernambuco, with an MBA in Projects by Fundação Getúlio Vargas. He is Executive Director of the Edson Mororó Moura Institute of Technology - ITEM.



INTERCONNECTED ELECTRIC MOBILITY

Example of Structuring Platform in Pernambuco



Realização:



SECRETARIA DE MEIO AMBIENTE
E SUSTENTABILIDADE
Pernambuco
GOVERNO DO ESTADO
JUNTOS, FAZEMOS MAIS.

UPLANET



Renewables 100
Policy Institute

Patrocínio:



Apoiadores:



Coordenação:



INOVACÃO E ECONOMIA CRIATIVA