

ECOEMPRENDEDORES POR EL CLIMA: ECONOMÍA VERDE COMO SOLUCIÓN A LA CRISIS CLIMÁTICA

Resumen (castellano):

Innovación y cooperación fueron los pilares del Acuerdo de París sobre cambio climático aprobado por la comunidad internacional para impedir un catastrófico aumento de las temperaturas hacia finales de siglo. Cumplir el Acuerdo va a transformar inevitablemente el modo en que producimos, transportamos y consumimos, acelerando la transición a una economía baja en carbono. Y ello no puede hacerse, sencillamente, sin el compromiso de emprendedores, startups, empresas y organizaciones de todo el mundo: es en el sector privado donde reside la mayor parte de los puestos de trabajo y el grueso de la actividad económica.

El sector privado, o al menos parte de él, lo ha entendido y se está ya movilizando para contribuir al cumplimiento del Acuerdo de París: emprendedores, startups y pymes de todo el mundo han puesto en marcha la organización sin ánimo de lucro Ecopreneurs for the Climate, entidad impulsora de la Semana Global de la Economía Verde y el Movimiento por el Clima, que celebra próximamente su segunda edición entre el 24 y el 30 de octubre de 2016. Su objetivo es intercambiar buenas prácticas empresariales en torno al clima e impulsar aquellas soluciones empresariales económicamente viables y socialmente empoderadoras de sus comunidades, que mejor nos permitan hacer frente a los retos del cambio climático.

Esta edición 2016 de la Semana Global, en la que participan 17 ciudades de 11 países diferentes, verá más que duplicado su impacto con respecto a su primera edición en 2015 (7 ciudades de 4 países). Seis ciudades son españolas en esta edición 2016: Barcelona, Madrid, Oviedo, Sevilla, Valencia y Vigo.

En 2017 la organización prevé evolucionar hacia una comunidad "glocal" de buenas prácticas climáticas y una red global de Laboratorios de Innovación Climática que genere innovación, intercambie buenas prácticas y consolide iniciativas empresariales que nos permitan avanzar hacia una economía verde y baja en carbono.

Esta comunicación expone los resultados de la edición 2016, con especial atención a lo acontecido en las 6 ciudades españolas referidas, y presenta el modelo de red global e interconectada que se pondrá en marcha en 2017.

Áreas temáticas: Energía, eficiencia y cambio climático; Economía y Sociedad

Palabras clave: Ecoemprendedores, Cambio Climático, Acción Climática, Economía Verde, Economía post-carbono, Sostenibilidad, Negocios Sostenibles.

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Comunicación:



On October 24-30, 2016, **22 cities from 16 countries** hosted events during the 2016 Global Week of Green Business and the Climate Movement (**#ECO4CLIM16**), seeking to connect, promote and empower **ecopreneurs** providing cooperative, sound, and **sustainable business solutions** to challenges deriving from **climate change**, both in the realm of mitigation (reducing carbon emissions) and adaptation & resilience of communities to its effects.

Impact has tripled with respect to the 2015 edition (7 cities in 4 countries), thanks to a vibrant, diverse, and collaborative community of <u>climate organizers</u> sharing a common vision: a "glocal" community of climate practice. These changemakers, at the heart of solid ecosystems of partners, and working at the intersection between civil society and business, have led successful ECO4CLIM16 events, encompassing multi-stakeholder **climate innovation labs** to identify climate-related problems and outline green business opportunities to tackle them locally; and the **2016 Climate Champion Awards** to bring into the spotlight sustainable projects and SMEs at the forefront of climate and social innovation.

While the full **ECO4CLIM16 Global Impact Report** is being drafted (to be released soon), we can already have a first glimpse at some preliminary results, including our 2016 climate champions. Next week, we are traveling to Marrakech for the **COP22** Climate Summit, where, just as we did last year in Paris at the historic COP21 (official EU workshop "Opportunities and challenges for SMEs in realising the COP21 vision"), we will bring the voice and solutions of our climate champions (with the COP22 Special Award winner joining us for the occasion, see below) to world decision makers and the Climate Movement as a whole. This time, besides organizing our own <u>event</u> on November 18, at 2:00 pm GMT (*"The Ecopreneurs for the Climate, from Paris to Marrakech with sustainable business solutions to climate change*"), in collaboration with Aribat Moubadara/Rabat Initiative and "Entrelles des Femmes Entrepreneures"; we are also hosting a panel led by the UN Foundation as part of its <u>Earth to Marrakech</u> initiative, which we are honored to be official partners of.

1. HOST CITIES

Algiers (Algeria), Athens (Greece), Barcelona (Spain), Berlin (Germany), Birzeit (Palestine), Cape Town (South Africa), Lisbon (Portugal), Lomé (Togo), Madrid (Spain), Mahdia (Tunisia), Marrakech (Morocco), Oviedo (Spain), Paris (France), Phnom Penh (Cambodia), Port Elizabeth (South Africa), Reading (England), Seville (Spain), Tokyo (Japan), Valencia (Spain), Vigo (Spain), Winterveld (South Africa), and Yerevan (Armenia).

2. PARTNERS

• Global partners (6): Impact Hub, SwitchMed, GreenEcoNet, Ecopreneur.eu, Green Shift Africa, and NESI Forum.





- Sustainable business networks (6): ECOVE (Spain), UnternehmensGrün (Germany), REMESS (Morocco), Entreprendre Vert (France), CONECT (Tunisia), Green Africa Directory (all Africa).
- Media partners (8): GreenTimes, Ambientum, Ecoticias, Corresponsables, El Referente, Asociacion Vida Sana, El Mundo Ecológico, and Noticias Positivas.

Climate organizers and local partners:

27 organizations and professionals led local ECO4CLIM16 chapters in their respective cities and communities, building and strengthening an ecosystem of **97 partners** from all sectors of the economy and society (NGOs, public agencies and institutions, financial institutions, individual experts ...), which in turn spread the word across and involved their own networks.

3. ATTENDANCE

In total **650 people**, 34 on average per city, attended the global week. And that amount will increase as the last remaining events take place in Lisbon, Loutraki and Marrakech (COP22) in the coming days and weeks.



Audience in Phnom Penh

In Berlin

4. CLIMATE INNOVATION LABS

As a small-scale preview of our global network of permanent <u>climate innovation labs</u> currently under development, ECO4CLIM16 hosted open co-creation sessions, in different formats (workshops, round-tables, debates...), where **key stakeholders** from local **green economy ecosystems** worked together to identify concrete **challenges** posed by climate change in their communities; and then outlined **opportunities** for sustainable, innovative,



and cooperative business solutions, seeking to inspire the aspiring **ecopreneurs** that participated. Herein below, some of the ideas that emerged (more to come in the final report), grouped by common topics:

- Local challenges derived from climate change:
 - ✓ Lack of information and awareness around the energy sector in general: electricity auctions, subsidies to fossil fuels, etc.
 - ✓ Traffic congestion, unsustainable/ineffective mobility and transport in urban environments and town centers in particular.
 - ✓ Unsustainable production/consumption patterns and urban centralization. The majority of the population is now concentrated in cities, which make an extensive use of resources and energy, consuming much more than they produce, and thus having large ecological footprints from long-distance transport for example.
 - ✓ Depopulation of rural areas

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- ✓ Massive tourism affecting local cultures, and small businesses, degrading the environment and causing vast of CO2 emissions
- ✓ Few clean energy options in some places.
- ✓ Centralized production of energy, particularly from fossil fuel sources.
- ✓ In retro-feedback, decentralized and collective, clean energy production schemes pose a challenge to large energy utility companies, as they imply loss of power and control.
- ✓ No clean water systems, misuse of water. No clean fresh water in canals. Inefficient water irrigation systems.
- ✓ Lack or inappropriate waste management.
- ✓ A culture of high plastic consumption.
- ✓ Air and noise pollution due to high use of motor vehicles. Motorbikes are considered 'cooler' than bicycles. Big cars represent a status symbol for the rich, implying small cars are nos very used.
- ✓ No emotional interest in sustainability/climate change due to lack of education or awareness, leading to bad environmental decisions. Also, in some communities (Phnom Penh) the majority of people are poor or even "BoP" (bottom of the pyramid)

• Green business opportunities

- ✓ A knowledge-centered company.
- ✓ A hub for the exchange of packages to avoid traffic of trucks and goods transport in cities.



- ✓ Urban orchards to function as green lungs for cities, and revive the system of an "ecologically productive" city. They are seeds of more positive impact activities, promote social awareness and urban planning from the grassroots.
- ✓ Eco-tourism as a means to attract specific tourist targets and address social and environmental concerns
- ✓ New energy systems for both production and consumption that decentralize and collectivize clean, renewable energy; with production happening at the user level, thus empowering of citizens and communities, and providing access to energy to rural and poor urban people otherwise left out.
- ✓ Increasing the use biomass in the energy mix of rural areas especially.
- ✓ Construction of wetlands to filter water, and rain tanks.Promotion of organic farming.
- ✓ Initiative that boost recycling and improve waste management.
- ✓ Educational campaigns to promote behavioral change around plastic use.
- ✓ Car-pooling/moto-pooling. Encouraging the use of bikes, which have a very positive impact on the environment, air quality and noise. Companies can contribute by incentivizing cycling among its workers.
- ✓ Providing tools to calculate, step by step and in a simple manner, the carbon footprint on daily basis
- ✓ Raising awareness about sustainability through fun and accessible activities like Yoga for instance.

Other more **large-scale challenges** that appeared, without (yet) some matching green business opportunities:

- Use of old technologies
- Mining and extractive & destructive practices
- Mass deforestation, and forest fires

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- o **Droughts**
- Ocean acidification and displacement of native fish species
- Corruption
- Oligopolies
- Insufficient investment and funding for SMEs and entrepreneurs
- Low self-confidence and belief in one's capacities to come up solutions to problems encountered.
- Lack of trust in sustainable brands: how do we know it is organic...?





- o Need for training and coaching to develop business ideas
- Lack of unions
- Lack of communication about and visibility of sustainable alternatives, especially coming from SMEs
- Low governmental support
- o Inadequate legislation and/or law enforcement

On the **opportunities** side, an open-minded approach to eco-entrepreneurship can yield great rewards. Same **basic principles** apply:

- > Joining and propelling social movements, by enabling climate action from civil society
- Partnerships with other sustainable organizations
- Breaking stereotypes
- Engaging in shared, collaborative and circular economy practices
- Exploring new technologies



Climate innovation labs in Madrid In Tokyo Recommendations for action at the strategic policy making and stakeholder level:

In order for those eco-entrepreneurial opportunities to blossom into high-impact sustainable businesses, all principal stakeholders need to contribute to supporting them. To this end, a vast array of strategic recommendations, concrete as well as broad, were shortlisted, and addressed at policy makers but also at other major actors of the local green economy:

- ✓ Fostering environmental education and a better education in general. Specifically, behavioral change campaigns around the various issues identified such as plastic consumption, water use, cycling, etc.
- Improving national strategies towards a clear and shared vision: sustainability and a low carbon and equitable economy.
- ✓ Encourage, from national policies, the transition to a decentralized, clean and 100% renewable energy system, and therefore reduce dependence on foreign, "dirty" energy sources such as coal, gas, oil …
- ✓ Catalyzing synergy creation among stakeholders.





- ✓ Constant improvement of legislation and broader outreach about it.
- ✓ Stronger engagement from local governments.
- ✓ Intensifying cooperation with international organizations.
- ✓ Taxation on plastic bags

- Enhance and promote public transportation, making it more accessible, while also bettering sustainable transport infrastructure, like making cycling safer. Make urban sustainable mobility more attractive for the masses through new communication strategies and action plans.
- ✓ Increasing taxes to discourage the use of individual motor vehicles.
- ✓ Creating more green spaces in urban environments.

Ambitious city-level pledges:

Taking a step further, some organizers were able to get to the stage of envisioning a sustainable future for their own communities, and materialized it into an ambitious city-level pledge, for decision makers to take good note of:

Berlin

- Goal: fully decarbonizing the city by 2050
- Strategy: building climate Innovation labs in neighborhoods, as well as a local climate think tank "COB1" parallel to COP22

Reading

- 2020 goal: empower the local government to create an inclusive accessible city (social inclusion and access to water, sanitation or electricity in high-risk areas) and shared development in accordance with the New Urban Agenda, the UN Habitat III framework. Implement new strategies to meet the sustainable development goals.
 - Concrete initiatives: 1) Comprehensive Cycle Network 2) Monthly Car-Free Work-Day, instigated by the Council 3) 25% Energy Self-Sufficiency from Berkshire renewables (PV roofs rather than panels) and Energy Storage 4) 25% Food Vegan Self- Sufficiency 5) Complete pesticides, Monsanto and shale gas extraction ban 6) 25% of new homes Passive House or better 7) Dedicate one city area to a Net Zero district, a green city showcase area. 8) Hydro-electric Dam up and running 9) All street lights maximum 3000K CCT + switched off/dimmed after midnight (BLACK NETWORK) 10) Waste collection system based on same county rules 11) Planning for disaster response.
- 2030 goal: connect regional and local city grids and networks to fulfill Agenda 2030 Global Goals. Fully developed partnership governance.
- 2050 goal: Reading City Clean soil, clean water and clean air to slow global warming.

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Climate innovators imagining a green Berlin



In Vigo



In Seville



5. 2016 CLIMATE CHAMPION AWARDS

Near **100 ecopreneurs** participated in the different activities programmed; specifically in the Climate Champion Awards where they pitched their projects, in 2 categories (some cities had a single, unified one): ecopreneurs -idea stage-, and SMEs -operational small organizations-. Winners were determined by a jury, and in some cases also the audience had a vote. Out of those, **26** were granted prizes and became the 2016 Climate Champions:

- <u>Ibero-Rest</u> (ecopreneur): project design for the ecological restoration of degraded natural areas.
- <u>Tech4plus</u> (SME): development and application of waste-water treatment technologies, in particular, thermal hydrolysis through a TH4+ process.
- <u>Green Age NGO</u> (ecopreneur): sustainable development strategies, environmental education and environmental projects with open source outcome.
- <u>ARK Armenia</u> (SME): development of infrastructure for sustainable eco-tourism services in Southern Armenia, including hiking, camping, organic farming, fitness &



volunteerism.

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- Sameh Hafsa (ecopreneur): solar-powered water desalination
- <u>Green Essential</u> (SME): extraction of essential oils from medicinal herbs such as rosemary, mint, geranium, etc.; while supporting women in rural regions of Tunisia
- <u>OEEX</u> (1st, single): peer-to-peer marketplace to connect regional energy producers, energy suppliers and customers in a smart energy community to share and trade their energy for better efficiency and use of local renewable energies.
- <u>Breeze</u> (2nd, single): air quality data, insights and recommendations to increase workforce health and productivity and to create a baseline for smart cities to measure the effect of ongoing citizen well-being projects.
- <u>Sharecy</u> (3rd, single): food savings through an efficient matching app, which allows food businesses to save resources, CO2 emissions and money.
- <u>Fresh Square</u> (audience prize, single): "smart garden" project that grows veggies in an organic soil, complying with the organic regulation at home.
- <u>CeroCeo2</u> via its project Green Urban Data (single): collection of satellite data and use of big data to measure and improve the environmental quality of cities
- <u>30 Días en Bici</u> (SME): fostering the daily use of the bicycle to enrich our lives, care for the planet Earth and make cities friendlier.
- <u>Soty Solar</u> (ecopreneur): online marketplace that brings together rooftop owners and energy companies, for the former to rent their rooftop to generate photo-voltaic solar energy investment-free, thus reducing their electricity bills.
- <u>Elum Energy</u> (single): software-as-a-service company developing the Energy OS, the first energy intelligence platform providing tailored microgrid solutions.
- <u>Pandorahub</u> (1st, single): a movement driven by the concern to build an alternative productive lifestyle, which aspires to become a network of startups, digital nomads, makers, organizations and places in harmony with nature and people.
- <u>Slow Sea</u> (2nd, single): an "eco shipyard lab", where green, zero-emission boats are built, combining scientific, ecological, and navigation progress.
- Climate Change Pioneers (single), StC Projects (Pty) Ltd (single), and Winterveld Recycling Art Project (single): info to come
- Richard (ecopreneur), and Glenda (SME): info to come
- **GREEN HUB** (ecopreneur): multi-story building right in the heart of Phnom Penh city where sustainable life styles come into practice; people can access ideas/knowledge/resources on green & sustainability, and feel inspired & fall in love with nature.
- <u>SGFE Cambodia</u> (SME): provides an alternative sustainable cooking fuel (charbriquettes from biomass waste like coconut shells) to the Cambodian population, to





replace the traditional charcoal.

- Juan Paredes Portela (ecopreneur): construction of fish passage devices in the first four dams of the "Miño Sil" river basin, promoting the development and growth of native fish populations for commercial and recreational interest.
- <u>Revertia</u> (SME): integral waste management service to re-use and/or recycle the waste generated by companies and institutions, with special focus on reusing obsolete IT equipment to extend its lifetime. Alternatives are compared over their carbon footprint.
- **REWET** -REduce Water Evaporation in Trees- (single): reduction of irrigation water consumption in the palm cultivation system, through an innovative tool that allows farmers to produce better fruits (dates) as well.
- PEAR Carbon Offset Initiative <u>"EGAO" project</u> (single): mini-solar home system providing opportunities to people without electricity in developing countries. Being 5-10 times brighter than solar lanterns, it permits room lighting using LED, light bulbs...



Climate ecopreneurs presenting in Yerevan



In Cape Town







In Vigo

Two of them received additional Global Special Awards:



- 76 countries: 7 with more than 100 visits, 15 with more than 30
- 439 cities
- 55 websites referred: 9 generated more than 20 visits

2017 New Economy & Social Innovation Global Forum Special Award: Karima Kerkeni, from Mahdia (Tunisia), for Green Essential, who will take part in the 2017 NESI Forum in Malaga (Spain) on April 19-22, 2017.





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Karima Kerkeni for Green Essential (Mahdia)









ECO4CLIM's global reach on the WWW

Twitter:

Conversation around the **#ECO4CLIM16** hashtag between October 10 and 30, 2016:

- **8.1 Million potential impressions**, 386.9 K on average per day
- 839.1 K potential users reached
- 473 users contributed to the conversation
- 3,478 tweets, with an average of 165.6 tweets/day, and a 4.8 retweet rate





TWITTER TRACKER: #ECO4CLIM16 Oct 10, 2016 - Oct 30, 2016 By Day 2N POTENTIAL IMPRESSIONS 1.5N 8.1M 839.1k C FREQUENCY 1N 9.68 POTENTIAL REACH Oct 16 Oct 18 Oct 12 Oct 14 Oct 20 Oct 22 800 TWEETS 600 599 3,478 RETWEETS 2,879 400 200 TOTAL TWEETS - - -Oct 12 Oct 14 Oct 16 TWEETS/ CONTRIBUTOR 7.4 473 AVG FOLLOWERS 2,547 50 CONTRIBUTORS Det 10. Oct 12. Oct 14. Oct 16. Oct 18. Oct 20. POTENTIAL IMPRESSIONS/TWEET POTENTIAL AVG TWEETS/DAY RETWEET RATE 165.62,336 386.9k 4.8

#ECO4CLIM16, a storm on Twitter

Facebook:

An illustrative example of our **collaborative**, **peer-to-peer approach**, rooted on common goals and smooth coordination, is the structure of Facebook pages for language communities (English, French, Spanish, Arabic, Japanese, Portuguese ... and more to come!) we are creating. They are co-managed by organizers bonded by common language, to share what the ecopreneurs for the climate do in their communities, speaking on behalf of the whole movement (power to changemakers!) And then we've got our global page, which feeds from those other pages, serving also as a research platform to find patterns, draw conclusions, compile results, etc. We are just at the fetal state, and there is loads of fine-tuning to do, but it's looking really promising. Let's have a look at what happened during **#ECO4CLIM16**, considering the 4 most active pages until now (global, Spanish, English and French), from October 12 to November 8:

- Total reach: 58,995 users
- Post engagements: 5,783
- New page likes: 359

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Export Data 🛃 Page Summary Last 28 days • Results from Oct 13, 2016 - Nov 09, 2016 📕 Organic 📕 Paid iiPage Likes iActions on Page Page Views October 12 - November 8 October 12 - November 8 October 12 - November 8 19 243 1 1 Page Likes A 1,005% Total Page Views **v 58%** We don't have data to show you this week. \hat{i} (i) G. Reach Post Engagements Videos October 12 - November 8 October 12 - November 8 October 12 - November 8 47,836 1 4,030 People Reached ▲ 476% Post Engagement 537% Total Video Views v 92% Spanish page Export Data 🕑 Page Summary Last 28 days # 📕 Organic 📒 Paid Results from Oct 13, 2016 - Nov 09, 2016 iiiPage Likes Actions on Page Page Views October 12 - November 8 October 12 - November 8 October 12 - November 8 32 49 1 1 Total Page Views 🕶 22% Page Likes A 133% We don't have data to show you this week. iii Reach Post Engagements Videos October 12 - November 8 October 12 - November 8 October 12 - November 8 7,051 3 616 People Reached A 77% Post Engagement v 34% Total Video Views **v83%**

Global page



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Page Summary Last 28 days * Export Data I Results from Oct 13, 2016 - Nov 09, 2016 Organic				
				27 Page Likes ▲ 35%
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Reach October 12 - November 8	<i>x</i>	Post Engagements October 12 - November 8	(i)	Videos October 12 - November 8
2,188 People Reached ▲ 625%		847 Post Engagement ▲ 1,702%		
$ \longrightarrow $				We don't have data to show you this week.

French page

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Ecopreneurs for the Climate - Global shared Armenia Tree Project's album.

Published by Rae Toticchi [?] · October 27 at 12:44pm · 🛞

Wow! So many beautiful pictures from our friends #ecopreneurs for the Climate of #Yerevan #Armenia!

#Eco4clim16 we are an amazing community! 👙

#Climateaction #cop22





Join the Ecopreneurs for the Climate in Reading @ECO4CLIM_Rdg Join the Ecopreneurs for the Climate in Reading "Glocal Week... CROWDFUNDER.CO.UK



Published by Marie-Laetitia Grd 🏾 🖓 · October 28 at 2:12pm · 🕲

Un grand merci à l'ensemble des participants de la 2e rencontre des #Eco4Clim16 à #Paris et en particulier à nos partenaires #SEIN #EntreprendreVert #InstitutÉnergieTerritoires et #Ecopreneur.eu ainsi qu'au Député François-Michel Lambert qui nous a fait l'honneur de conclure l'évènement. Bravo au grand gagnant du prix #ClimateChampionAward pour Paris #ElumEnergy mais aussi à tous les candidats qui portent de beaux projets de développement durable #InnoValys #CleanCup #Tomaro #WaterEcosystem et #EcoloTourParis !





7. PICTURES

Entire photo album here. Each event in one shot:

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Algiers (Algeria)



Barcelona (Spain)



Berlin (Germany)



Birzeit (Palestine)



Cape Town (South Africa)



Lomé (Togo)

DEL 28 DE NOVIEMBRE AL 1 DE DICIEMBRE. MADRID





Madrid (Spain)



Mahdia (Tunisia)



Oviedo (Spain)



Paris (France)



Phnom Penh (Cambodia)





Korrakech (Morocco)





Port Elizabeth (South Africa)



Seville (Spain)



Valencia (Spain)

Reading (England)



Tokyo (Japan)



Vigo (Spain)



Yerevan (Armenia)