



Climate-KIC Malta Newsletter

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Valletta

European Capital of Culture 2018



EUROPEAN CAPITAL OF CULTURE

Next year promises to be an interesting period in life of the City of Valletta.

The European Capital of Culture year begins with a unique celebration that's worthy of the traditional Maltese Festa during the 14th – 20th January.

Valletta 2018 will be an exciting year-long celebration – a cultural programme that starts in the capital city and reaches out to towns and villages all over Malta and Gozo. The opening week will draw crowds to the heart of Valletta with music and entertainment, street artists

and performers spreading word of the Opening around the capital's streets, exhibitions set in diverse venues around the city, open days that re-discover Valletta's fascinating historical spaces, community storytelling events centred around the city's residents and the spaces they use, and much more.

For a full programme of events through the celebration visit www.valletta2018.org/events

Pioneers into Practice



Two Climate-KIC pioneers placement at the Institute for Sustainable Energy

Jonas Ott (Germany) and Máté Osvald (Hungary) have started their placement at the Institute for Sustainable Energy of the University of Malta, under the Climate-KIC initiative, which is managed locally by Paragon Europe.

Jonas is working on passivation techniques used for solar wafers, under the supervision of Prof. Luciano Mule' Stagno and Mr Mark Anthony Callus, while Máté is carrying out an analysis of energy efficiency measures at the St. Nicholas College Siggiewi Primary School,

focusing on the effect of the motorised vertical louvre shading system, under the supervision of Eur. Ing. Dr. Charles Yousif and Ing. Damien Gatt.

Climate-KIC stands for Climate Knowledge and Innovation Communities managed by the European Institute of Innovation and Technology (EIT). The EIT is an EU body whose mission is to create sustainable growth, by addressing climate change mitigation and adaptation.

If you are interested in participating in the Pioneers into Practice programme in 2018 please contact Gonca Kara Demir:

gonca.kara@paragoneurope.eu
www.pioneers.climate-kic.org

Climathon



Climathon - International Pioneers Win

Valletta, Malta - 28th October 2017

First Prize at this year's Climathon went to a team comprised of young professionals who have been visiting Malta conducting a project under the auspices of the Pioneers into Practice programme. Their winning innovative idea contained a simple approach to compressing waste from restaurants into small containers and then transporting it using e-bikes to a central location outside of Valletta. Not only was the idea simple but it also met the key criteria of being easy to implement and commercially viable. The idea was enthusiastically received by the Mayor of Valletta and the panel of judges.

Congratulations to the winning team and to everyone who participated in making this an interesting and enjoyable event.



Digital Skills & Jobs Coalition

The EU will invest over EUR 27 million co-funding projects to further improve European digital services. The evaluation of the first 2017 CEF Telecom call for proposals (CEF-TC-2017-1) has concluded and 33 projects were selected.

CEF Telecom funding is dedicated to Digital Service Infrastructures (DSIs) delivering networked cross-border services for citizens, businesses and public administrations. Supported projects will contribute to improving the competitiveness of the European economy, promoting the interconnection and interoperability of national, regional and local networks and access to these networks, thus supporting the development of a Digital Single Market. CEF Telecom has an overall budget of EUR 1.04 billion (2014-2020).

Why not become a member of the Digital Skills and Jobs Coalition?

Info:
www.ec.europa.eu/digital-single-market/en/become-member-digital-skills-and-jobs-coalition

Climate-KIC Events

Paragon Europe and Climate-KIC continuously throughout the year organise a number of events focussed on encouraging greater co-operation amongst local stakeholders, looking at the challenges we face and innovative ways to tackle these. The forthcoming events both locally and internationally are focussed on Urban Transitions and other key priorities we are seeking to address in 2017 and beyond.

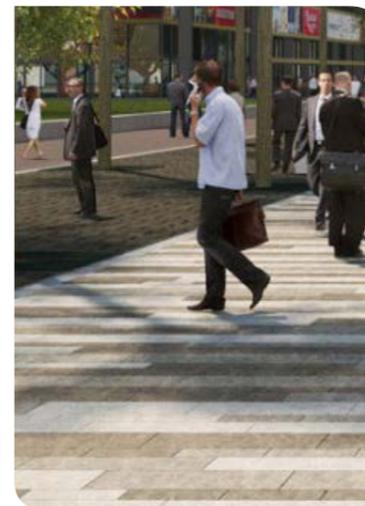


Climate-KIC Malta - Stakeholder Day

6th - 7th December 2017

In preparation for the 2018 programme, the team at Paragon Europe will be hosting a full-day of presentations explaining all the programmes including Pioneers-into-Practice, Business Accelerator. If you are interested in learning more about the numerous opportunities available then please register your interest by contacting Mark Brown: mark.brown@paragoneurope.eu

Venue: Malta Life Sciences Park



Transition in Cities

5th December 2017

The goal of this project is to kick-start the Transition Cities approach in Valletta to stimulate transformation and address the main urban sustainability challenges. Valletta requires significant CO2 reduction – buildings, mobility and energy networks – and the city has embarked in a transition phase which would lead the capital to be carbon-neutral in 2030. With the goal of developing its Urban Socio-Technical Map and validated list of innovation areas and potential actions aligned to the policy challenge in 2018 (Roadmap), this project will deliver the Teaser and preparatory activities for the Pilot. The workshop is being delivered by Climate-KIC international experts in conjunction with Paragon Europe.

If you are interested in attending, please contact Mark via e-mail: mark.brown@paragoneurope.eu

Venue: Malta Life Sciences Park



The Journey

Looking ahead to what we have planned for 2018, Paragon Europe will be participating (for the first time) in The Journey.

The course offers a unique combination of academic study and real-world business experience with the aim of creating the climate change leaders of tomorrow. In 2017 the course encompassed 18 locations across Europe, being Climate-KIC's largest summer school. Students are divided into separate groups and each group journeys across three different European locations, gaining insight and experience from a selection of Europe's best universities and most innovative businesses. It brings together students and young professionals all over the world.

If you know someone who is interesting in participating during 2018 please contact Gonca Kara Demir:

gonca.kara@paragoneurope.eu



Daily Planet

European heat waves are becoming more extensive and prolonged due to climate change



European summer temperatures have increased far more rapidly than the trends for the Northern Hemisphere since the early 1950's, says a new study lead by Prof. Martin Beniston, a climate scientist based in Switzerland.

While mean summer temperature in the Northern Hemisphere has increased by 0.21°C per decade between 1951 and 2015, the increase was 0.46°C per decade for Europe.

This rise in mean European summer temperatures has contributed to the intensity of recent European heat waves, like the ones in 2003, 2010, and 2015. What if climate had remained as it was in the mid-20th century, in terms of the number of hot days? This was analysed for temperature records of 14 climate stations across Europe.

If Europe's climate hadn't changed since the 1950's, the number of hot days with a maximum temperature of over 30°C would have been 10 to 25 per cent less. The number of hot days over 35°C would have been 25 to 50 per cent less, according to this study. This serves to illustrate that climate change is not simply a matter of gradual shifts in mean values, but also of strong increases of the frequencies of extremes. As a result heat waves are becoming more extensive and prolonged, with stronger impacts on society.

The article first appeared on Climate Change Post and is a digest of a scientific paper by Beniston et al., 2017. Environmental Science & Policy 67: 27-34.

Source: www.dailyplanet.climate-kic.org/european-heat-waves-like-1950s-climate-hadnt-changed



International Conferences

MEDENER International Conference on Energy Transition 30th November 2017

Paragon Chairman, Edwin Ward is attending the 5th Edition of the MEDENER, the Mediterranean Association of the National Agencies for Energy Conservation, in partnership and with the support of ADENE, the Portuguese Energy Agency the conference addressed Climate change and migration in the Mediterranean region through energy transition. The Chairman presentation will be addressing the Energy transition models in Mediterranean Cities: Energy transition in Valletta. Taking place in Lisbon the MEDENER International Conference is an informative and networking day between representatives of national public administrations, policymakers, energy agencies and many other public and private stakeholders in the energy sector, from both shores of the Mediterranean.



The premier international meeting for the low-carbon and resource-efficient economy 12th-14th December 2017

The World Efficiency Solutions platform links public and private stakeholders committed to developing a low-carbon and resource-efficient economy, with the largest number of active solutions providers.

A unique network of cities and businesses from over 90 countries connecting both online and face to face to meet, present projects, share experiences and convince investors, partners and customers to speed up the transition to a circular economy.

Info: www.world-efficiency.com

Venue: Paris Porte de Versailles Hall 7.2



The World Economic Forum Annual Meeting 2018 23th-26th January

The World Economic Forum Annual Meeting 2018, which will take place on 23-26 January in Davos-Klosters, Switzerland, will convene under the theme, Creating a Shared Future in a Fractured World.

Bringing together over 2,500 leaders from business, government, international organizations, civil society, academia, media and the arts, the aim of the meeting will be to set an agenda that drives greater multistakeholder collaboration to address political, economic and societal challenges of our times.

Info: www.weforum.org/press/2017/09/world-economic-forum-2018-to-call-for-strengthening-cooperation-in-a-fractured-world

Climate Change News



Dangerous global warming unstoppable without geo-engineering, says study

www.euractiv.com

The international community has already missed its chance to limit global warming to between 1.5 and 2 degrees Celsius, according to a new study by Switzerland-based researchers. But a solution to the problem could lie in geo-engineering technologies.

Under the Paris Agreement, countries agreed to try and prevent global warming from exceeding 2 degrees Celsius in order to avoid irreversible and dangerous climate change.

But new research, published in the Climatic Change journal, has revealed that it is already too late to meet that target, after scientists used sophisticated computer modelling to predict what steps actually need to be taken.

Their solution to the problem is direct air capture (DAC) technology, which involves filtering carbon directly out of the air we breathe and using it to grow plantlife, which will result in negative carbon emissions.

The Switzerland-based researchers insisted that "with our modelling assumptions, limiting global temperature to 1.5C is only possible when using direct air capture". Even then, they predict that we will still exceed 1.5C but that DAC is a way of bringing temperatures back down below that limit.

That would involve building facilities like the Climeworks AG's commercial plant near Zurich, which opened in July and hopes to remove about 900 tonnes of CO2 from the air every year. Using filters, the plant removes the gas and pumps it into local greenhouses, where it helps grow vegetables.

Although the scale of the venture is small — 900 tonnes roughly equals the annual emissions of 200 cars — Climeworks insists it is just a first step towards its aspiration of removing 1% of global carbon emissions using this method.

Full Story:

www.euractiv.com/section/climate-environment/news/dangerous-global-warming-unstoppable-without-geo-engineering-says-study

Project ZeroCO2

Did you know that as of 1st January 2019, all new and renovated public authority buildings have to be nearly zero energy building, so as to lead by example and prepare the transition to nearly zero energy buildings by 2021?

The Interreg-Europe project ZeroCO2 addresses this issue and goes beyond it to define also a nearly zero carbon dioxide building due to energy use. This means that the project focuses on the reduction of the carbon footprint of the building during its operational lifetime, which has a share of up to 80% of the total lifecycle of the building. The remaining 20% is consumed during the construction and demolition of the building but this is outside the scope of the project.

The project ZeroCO2 is now in its fourth semester that will end on 31st march 2018. So far, the project has identified the existing policies that promotes energy efficiency and renewable energies in Malta and have come up with a number of proposals to address the weaknesses and opportunities available to enhance these policies. This was carried out through

active discussions with national stakeholders and public authorities engaged in policy making for buildings, energy efficiency and renewable energy.

A number of best-practice examples have been identified for different public buildings such as hotels, restaurants and shops. The potential for reducing the carbon footprint is large and doable. A number of reports have been published to substantiate this claim. Technology options have been identified and cost optimal studies carried out to find the best combination of technology for different building sectors.

During the fourth semester, a policy action plan will be proposed to policy makers at three levels, immediate, short-term and long-term levels. The immediate policy proposals will focus on soft measures that would enhance interest in energy efficiency and

renewable energies beyond the obvious, such as photovoltaics. Fiscal support schemes will also be proposed for new technologies that have a high potential of reducing the carbon footprint but are still not cost effective.

The next two years will see the project's policy action plan presented to the policy makers in order to encourage its adoption, as appropriate. Interreg-Europe projects have the mission of engaging policy makers and public servants from different regions to learn from experience, share best-practices and eventually implement policy measures that help fulfil the EU's priorities in energy efficiency, renewables, the environment and other sectors.

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Institute for Sustainable Energy
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For further information on the project, please visit us:

Website:	www.interregeurope.eu/zeroco2
Facebook:	www.facebook.com/ZEROCO2Project
E-mail:	charles.yousif@um.edu.mt



In the News

The Malta Independent
November 9, 2017

An idea that may change Valletta

Mandatory waste dispenser systems for all restaurants in Valletta, banning the use of single-use black bags, and an App that shows left-over meals in shops, restaurants and pizzerias for people to purchase at a reduced price, was judged as the winning idea following last weekend's 24-hour non-stop Climathon hosted by Paragon Europe together with Climate-KIC at the Excelsior Hotel in Floriana.

Developed and submitted by V-Shred Team made up of five students, the winning idea will now be developed further to be made eligible to the Climate-KIC startup process and put into motion in various phases.

The project that placed 2nd was WaterPlas+ by ClimAct Team which sought to encourage the reuse of water bottles through the application of a water-dispensing system thus leading to a drastic reduction in plastic bottles and plastic packaging. The project that placed third, proposed the distribution of barcoded recycling bags to help monitor and improve disposal patterns with the aim of taxing those who dispose the most.

Organised by Climate-KIC, this global 24-hour climate change Hackathon was held across 109 cities in 56 countries around the world and saw the submission of over 5,508 ideas towards a cleaner environment and to mitigate climate change.

Alexiei Dingli, Mayor of Valletta introduced the event. "Valletta is a very complex city because it has a number of different realities namely the residential reality, the commercial reality, the touristic reality, the services offered to all those living or visiting the city and the entertainment reality. All these stakeholders put together, generate a lot of waste. The increasing generated waste is one of Valletta's main problems today and this is the challenge that we are hoping the winning team during this Climathon can help us solve through the application of innovative and creative solutions. Such a solution rests on three pillars - reducing waste, helping people especially residents manage and separate waste more easily and educating the public to recycle more."

In his keynote address, Bertrand Van Ee, former global CEO of Climate-KIC explained how Malta's track record when it comes to recycling is very low. "In fact, Malta is at the fifth place from the bottom amongst all EU countries. The EU countries that recycle most are Austria (70%), Germany (62%), Belgium (62%) and the Netherlands (61%). Malta stands at 12% followed by Latvia (10%), Lithuania (7%) and Romania (1%). Only Bulgaria does not recycle. The EU average is of 40% recycling, 22% incineration and 38% dumping."

Referring to his native city Amsterdam, Bertrand Van Ee noted how with an environmentally conscious population that is world-famous for using bicycles, Amsterdam ranks amongst the top three cities in both Recycled waste and Air pollution, which are key factors for Amsterdam's top position. "Through the municipal waste and energy company (AEB), 99% of the municipal waste is recycled and reused in new raw materials as well as turned into sustainable electricity and city heating."

Edwin Ward, Chairman of Paragon Europe expressed his satisfaction at

the outcomes of this year's second edition of the Climathon event in Malta.

"During this 24-hour event, we had the opportunity to truly appreciate the uniqueness of Valletta as well as the unique challenges that its administrators have to face on a daily basis. Tackling the varied and equally important aspects of how to reduce municipal waste in innovative ways is no easy task because it not only depends on the city's residents or the people who work or seek entertainment but it requires a collective effort by everyone to bring a change in culture. We need to be more open to new methods of how we can implement better waste separation, how to educate children and families and how we can utilize technology that can help us improve the existing situation," said Edwin Ward.

Joe Attard, CEO of GreenMT gave an overview of waste separation and waste management patterns in Valletta. He noted how Valletta's residents contribute 4.3 tons of mixed waste every day and 1570 tonnes annually and that as at 2016, the total amount of residential and commercial mixed waste was of 4056 tonnes. The cost of Recyclable Collection stands at €1,534 per month and the volumes of separated waste collection this year stands at 125 tons compared to 64 tonnes in 2015 and 94 tonnes in 2016.

Mr Attard also suggested a number of initiatives that should be taken up as a way forward for Valletta namely waste reduction incentives, fiscal payment for mixed waste generation, introduction of organic food waste collection, different coloured bags for catering establishments, waste managers under the Condominium Act, the introduction of electronic access bring-in-sites, night waste collections & night street sweeping, hybrid/electric/gas vehicles for collections and a dedicated timed waste collection at a fee.

Greenhouse

Greenhouse gas concentrations surge to new record

Concentrations of carbon dioxide in the atmosphere surged at a record-breaking speed in 2016 to the highest level in 800,000 years, according to the World Meteorological Organization's Greenhouse Gas Bulletin. The abrupt changes in the atmosphere witnessed in the past 70 years are without precedent.

Globally averaged concentrations of CO2 reached 403.3 parts per million in 2016, up from 400.00 ppm in 2015 because of a combination of human activities and a strong El Niño event. Concentrations of CO2 are now 145% of pre-industrial (before 1750) levels, according to the Greenhouse Gas Bulletin.

To read the full report [Click Here: www.sciencedaily.com](http://www.sciencedaily.com)

Climate Change Is Already A Public Health Crisis

Climate change is already taking a major toll on public health and threatening to reverse progress made over the past century in combatting infectious diseases, according to one of the world's oldest and most respected medical journals.

In a landmark new report released on Monday 20th October, The Lancet found that heatwaves over the past two decades were hotter and lasted longer, vector-borne diseases increased as warmer temperatures spread insects, and allergies worsened as unseasonable weather prolonged exposure to pollen.

To read the full report [Click Here: www.huffingtonpost.com](http://www.huffingtonpost.com)



Global Climate Finance

- Climate finance flows reached a record high of \$437 billion dollars in 2015, followed by a 12% drop in 2016 to \$383 billion, although still higher than flows in 2012 and 2013. Taking into account annual fluctuations, the average flows across 2015/2016 were 12% higher than during 2013/2014.
- The record in 2015 was driven by a surge in private renewable investments, particularly in China, and in rooftop solar power in the U.S. and Japan.
- The decrease in 2016 was due to a combination of both falling technology costs and lower capacity additions in some countries. Technology costs decreased an average of 10% between 2015 and 2016, with particular decreases from solar. At the same time, new capacity additions slowed down in China, which saw a scheduled phase-down in revenue support for wind projects and a greater emphasis on grid integration for existing capacity.
- Annual solar rooftop photovoltaic (PV) and onshore wind capacity additions and investment are on track to meet their share of the 2 °C goal, according to the International Energy Agency scenario, and investments in these technologies outpaced fossil fuel power investments by over 100% (IEA 2017c, 2016b). However, a broader scale up of investments across all sectors of the economy is needed. For the energy sector, including energy use in power, transportation, and buildings, the needs total over \$1 trillion per year through 2050. Even more is needed in agriculture, forestry, water, and waste to enable a low-carbon transition, while adaptation finance needs are also pressing in order to minimize the costs of climate impacts that are already locked in.
- Part of this scale up in climate finance may be based on the shift of existing investments in traditional fossil fuel activities towards climate-compatible activities. Total upstream and downstream fossil fuel investment in 2016 of \$825 billion indicates that significant potentially stranded investments could be reallocated to meet low-carbon investment needs (IEA 2017a).

For Full Report: www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2017



Programmes & Courses



FREE Training Courses



Renewable Energy Innovation

The Renewable Energy Innovation (REI) MOOC is an action-based learning resource designed for anyone with an interest in finding ways to use renewable energy to fight climate change. You might be an educator, a budding entrepreneur, a researcher, a school or university student, or just an interested member of the public.

At the heart of the MOOC is our REI Challenge: Can YOU help solve the most urgent problems that are a barrier to using renewable energy?

Visit the webpage for further details:
www.learning.climate-kic.org/courses/rei-mooc

Pitch Training

The Countdown to a great pitch course provides a learning journey through which you can plan and develop your own great pitch or presentation – and then use peer feedback as you perfect and practise it.

You will find out:

- What makes a great pitch
- How to find the right words to put your message across
- Ways to structure your pitch to make it impactful and easy to follow
- Tips for practising and delivering your pitch to get your main points across.

In addition, you can learn about 'Science communication for researchers' and will be provided with templates, activities and assignments to help you on your way!

Visit the webpage for further details:
www.learning.climate-kic.org/courses/pitch-training



The Resolution Challenge

Take part in our worldwide challenge and entrepreneurial community to develop innovative and sustainable business ideas to improve our cities, how we produce things and the way we use our land.

Your challenge is to become one of those entrepreneurs who makes a difference in the world. Supported by our online course, you'll create and develop a sustainable business idea.

We look forward to working with you and seeing your ideas! The best ideas for more sustainable land use, production systems and cities will be rewarded and will receive expert coaching.

Visit the webpage for further details:
www.learning.climate-kic.org/courses/i-e-mooc

The E-Waste Challenge

Find out why Achim Steiner, Executive Director of the United Nations Environment Programme, thinks e-waste is the challenge of our century – and how, if we work together, we can turn this challenge into an opportunity to help mitigate climate change, create green jobs, and help countries kick-start a circular economy.

Visit the webpage for further details:
www.learning.climate-kic.org/courses/e-waste-mooc



Ideating Climate Business

Your climate impact challenge. If you care about the planet and are looking for inspiration, Climate-KIC's Ideating Climate Business course is for you! Joining this course, you get the opportunity to become part of a dynamic global community to develop game-changing climate innovation.

Visit the webpage for further details:
www.learning.climate-kic.org/courses/ideating-climate-business



Introduction to CO2 Re-use

Industry uses fossil fuels and other raw materials to generate the power and products that we all rely on. But at what cost? When we burn fossil fuels, we generate lots of CO2. Too much!

Where there is challenge, there is opportunity! First we must reduce the CO2 we produce, through efficient use of resources. What's next? Re-use: Let's capture the CO2 emissions and put them to work!

Visit the webpage for further details:
www.learning.climate-kic.org/courses/enco2re





Malta Stakeholder Events

What's happening in Malta?

The following forthcoming local events are organized by the Chamber of Engineers (CoE) and Zaar.

The Malta Engineering Excellence Awards (MEEA) 12th December 2017

The Chamber of Engineers (CoE) has recently launched the 16th edition of the Malta Engineering Excellence Awards (MEEA).

The CoE are seeking corporate and engineering companies in Malta to obtain their support for this prestigious event. The Chamber of Engineers invites companies to participate in this yearly event as a celebration of achievements by the local engineering community. The MEEA showcases the excellence in engineering innovation and its positive impact on the Maltese society.

These awards are actually presented during the Chamber of Engineers annual reception which will be held under the Distinguished Patronage of H.E. Marie-Louise Coleiro Preca, President of Malta. This year the event will be held at the Verdala Palace on the evening of the 12th December 2017.

This year two awards will be presented namely The Maurice Debono Lifetime Achievement, and the Industrial Excellence Awards. During the same event, the Best Student Projects' CoE Awards will also take place. For further information please refer to attached brochure.

For further details contact Marcelle Abela, Secretariat: info@coe.org.mt

Free Crowdfunding Clinic 6th December 2017

Dynamic #ZaarClinic on 6 December 2017 at 5.30pm to find out how crowdfunding could work for you.

This is an interactive Q&A session that will answer all your questions about crowdfunding, including the basics:

- Bring your ideas forward and ask for advice on how to crowdfund them
- Get guidance on how to build a successful campaign
- Discuss your pitch and rewards with us and other attendees
- Ask any questions that come to mind
- Take the first steps towards making your idea a reality!

The Zaar objective is to get your ideas funded and make your crowdfunding campaign a success.

If you are interested, this crowdfunding clinic is free of charge but registration is required.

[Register now](#)

BEST

BEST – the innovative scheme placing Malta's Hotel Industry on top of Energy Efficiency in the Mediterranean and Europe. Catch it all in the February Edition