

ACTIVITY REPORT

2019

04 2019 IN NUMBERS

08 AWARDS

10 PROJECTS

32 SIMULATIONS

42 OTHER EVENTS

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SPECIAL THANKS

The Centre for Systems Solutions would like to express great appreciation to Jan Sendzimir. Our organization wouldn't be the same without his support and creativity. Not only was he one of its main ideators but has also offered assistance in implementing it.

14 NEW SOCIAL SIMULATIONS

IN 8 LANGUAGES



4 ARTISTIC EVENTS



10 PROJECTS

2 NEW STAFF MEMBERS



AGATA
GAME
DESIGNER

ANIA
INTERNATIONAL
PROJECT MANAGER

Deep Demonstrations Forging Resilience

SUSTAIN: Game-based learning on urban sustainability

RURITAGE: Rural regeneration through systemic heritage-led strategies

CASCADES: Cascading climate risks: towards adaptive and resilient european societies

ARRE: Accelerating the rebooting of regional economies via a sustainable development goals simulation game

CO-DESIGN: Addressing energy transition gaps in climate and energy model regions of Austria through policy co-design

SUSFISH+: Sustainable management of water and fish resources

Nauru Game for active citizenship of youth

Pioneers into practice

The Prince

CENTRE FOR SYSTEMS

2019

ITALY	Alma Mater Studiorum – University of Bologna (UNIBO) Agency for the Promotion of European Research (APRE) Politecnico di Torino (POLITO) Borghi Italia Tour Network SRL (BITN) Municipality of Appignano del Tronto (COAPP) Distretto Agroalimentare Regionale Srl (DARE) PIAM Onlus (PIAM) Ergo Ludo Editions Systems Dynamics Italian Chapter Fondazione Centro Euro-Mediterraneo sui Cambiamenti Climatici	TURKEY	İzmir Metropolitan Municipality (IZM) DEMİR (DEM) İzmir Institute of Technology (IZTECH)
AUSTRIA	Österreichische Austauschdienst The Austrian Partnership Programme in Higher Education and Research for Development University of Natural Resources and Life Sciences University of Vienna The Wegener Center for Climate and Global Change International Institute for Applied Systems Analysis Wirtschaftsuniversität Wien	UK	University of Plymouth (UOP) University of York The Royal Institute of International Affairs
SPAIN	Consulta Europa Projects and Innovation (CE) Fundación Tecnalia Research and Innovation (TECNALIA) Fundacion CARTIF (CARTIF) Santa María la Real Foundation of Historic Heritage (FSMLRPH) AEICE Construction and Habitat Cluster (AEICE) Centre for International Information and Documentation in Barcelona	FINLAND	Savonia University of Applied Sciences (SAVONIA UAS) Suomen Ymparistokeskus
BURKINA FASO	Institute for Environmental and Agricultural Research University of Ouagadougou Polytechnic University of Bobo-Dioulasso International Union for Conservation of Nature, General Directorate for Fish Resources Ministry of Environment and Fish Resources	NORWAY	Magma UNESCO Geopark (MAGMA UG) Norwegian University of Life Sciences (NMBU)
FRANCE	United Nations Educational, Scientific and Cultural Organization (UNESCO) ACIR Compostelle (ACIR) UNESCO Global Geopark Haute Provence (UGHP)	POLAND	Polish Theatre in the Underground Grotowski Institute
GERMANY	ICLEI European Secretariat GmbH (ICLEI EURO) Geo-Naturpark Bergstrasse-Odenwald (GEO-N) Adelphi Research Gemeinnützige GmbH	SLOVENIA	Association for Culture and Education KIBLA Institute for Culture, Tourism and Promotion of Gornja Radgona
GREECE	Natural History Museum of the Lesvos Petrified Forest (NHMLPF) University of Crete – Natural History Museum of Crete (UOC) Hellenic Institute of Transport/Centre for Research & Technology Hellas University of Macedonia	THE NETHERLANDS	Almende BV (ALM) European Centre for Development Policy Management
HUNGARY	Municipality of Visegrád (VVO) ÉMI Nonprofit Limited Liability Company for Quality Control and Innovation in Building (ÉMI) Rogers Foundation for Person-Centred Education	AUSTRIA/SLOVENIA	ARGE Geopark Karawanken/Karavanke (ARGE GK)
ROMANIA	Harghita County Council (HCC) Association Pro Educatione Transilvaniensis (PRO EDU) Society for Responsible Consumption Romania	BELGIUM	Climate-KIC
		BRASIL	Pontifical Catholic University of Minas Gerais (PUC MINAS)
		COLOMBIA	Federación Colombiana de Municipios (FCM)
		ICELAND	Katla UNESCO Global Geopark (KATLA)
		IRELAND	Innovation and Management Center Limited (WESBIC)
		SLOVAKIA	Tandem n.o.
		SWEDEN	Stiftelsen The Stockholm Environment Institute
		SWITZERLAND	Eidgenoessische Technische Hochschule Zuerich

70 PARTNERS
FROM 25 COUNTRIES

10
PEOPLE

HAVE RUN


36
WORKSHOPS

IN

19
COUNTRIES

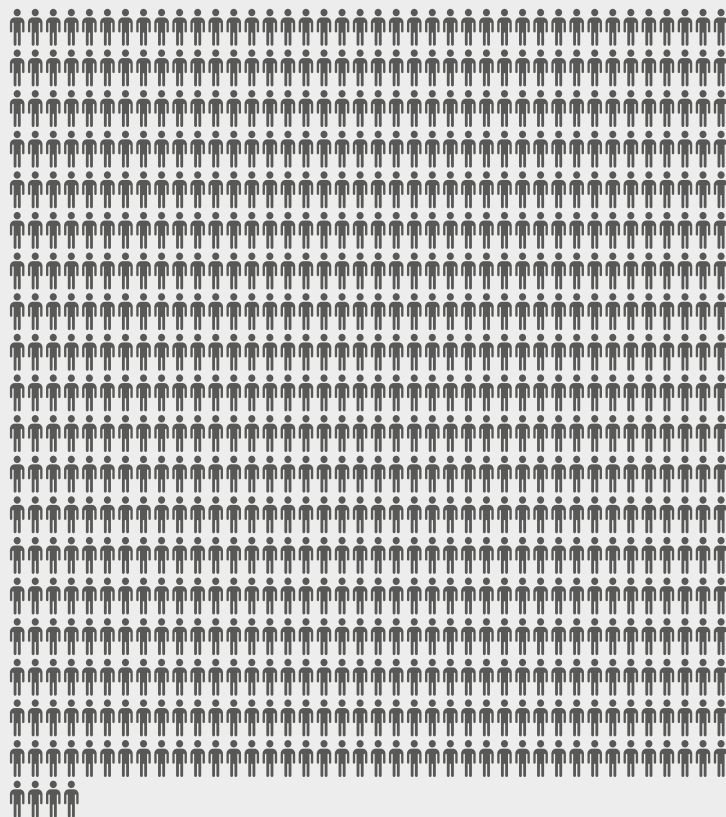
 ALBANIA •
 AUSTRIA •••••
 BELGIUM ••
 BOTSWANA •
 BURKINA FASO •
 CYPRUS •

 GERMANY •••••
 GREECE •
 HUNGARY ••
 IRELAND •
 ITALY •
 JORDAN •
 NETHERLANDS •

 NORWAY •
 POLAND •••••
 SLOVENIA ••
 SPAIN ••
 TURKEY •
 USA ••

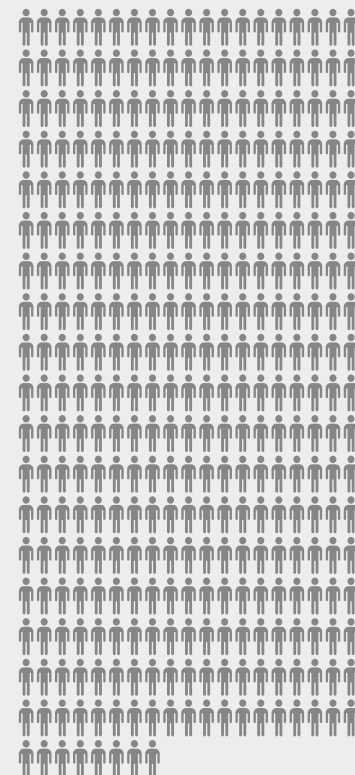
764

PARTICIPANTS
IN WORKSHOPS
WITH SOCIAL
SIMULATIONS



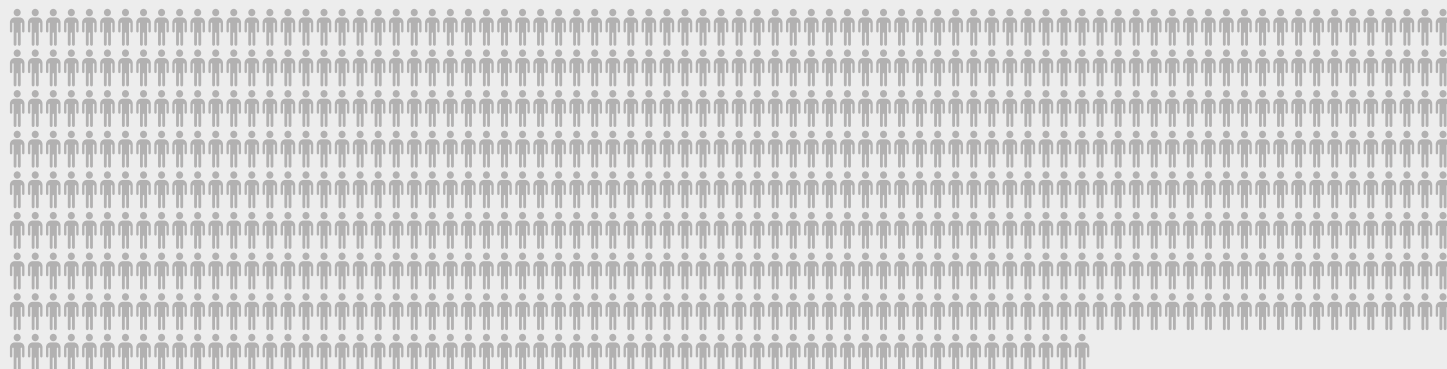
≈350

PARTICIPANTS
IN THE PRINCE



≈700

VIEWERS OF
DANCING WITH
THE FUTURE



AWARDS

Aleksandra Solińska - Nowak receives
Educators' Challenge Award for New
Shores - a Game for Democracy.
London, May 2019.
(Photo: Maria Moore)



MAY

EDUCATORS' CHALLENGE AWARDS CEREMONY AND THE EDUCATORS' CHALLENGE PRESENTATION IN LSE - INSTITUTE OF GLOBAL AFFAIRS IN LONDON



On May 15, 2019, the *Educators' Challenge Awards'* ceremony was organized by the Global Challenges Foundation. The event held at the Old Theatre of LSE — Institute of Global Affairs gathered 10 finalists of the *Educators' Challenge* competition. They had the unique opportunity to present their ideas and methods on how to best communicate some of the pressing risks before the Final Jury and the audience present at the Theatre. In the evening, the winning prizes of 5000\$ were awarded to the most creative and effective proposals. We are happy to announce that the *New Shores - a Game for Democracy* was among the winning projects!

DECEMBER

EDUINSPIRACJE AWARD CEREMONY „DZIAŁAM I INSPIRUJĘ” BY FUNDACJA ROZWOJU SYSTEMU EDUKACJI (FRSE) IN WARSAW



Photo: FRSE resources

On December 3, 2019, the *EDUInspirations Awards Gala* was held at the Ujazdowski Castle. The event entitled *I act and inspire* gathered a group of educators, journalists and activists nominated for educational awards in three main categories: EDUInspiracje, EDUInspiracjeMedia, and EDUInspirator. We are pleased to announce that our project, *Nauru Game for Active Citizenship of Europe*, won the main prize in the first category!





PROJECTS

*Documenting one of the very first tests of Ruritania Game.
Wyższa Szkoła Filologiczna, Wrocław, March 2019.
More about the project on the next page.*

RURITAGE

Duration: **2018-2022**

Contact: **Anna Koch**

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RURITAGE is a 4-year project funded under the EU *Horizon 2020* programme. Its main goal is the creation of an innovative rural regeneration paradigm, based on Cultural and Natural Heritage. In this way, the project aims to consolidate the role of culture as the fourth pillar of sustainable development and contribute to economic growth, social inclusion and environmental sustainability in rural areas. By establishing a new heritage-led rural regeneration approach, *RURITAGE* aims to exploit the unique heritage potential of the selected rural areas and turn them into sustainable development demonstration laboratories. Based on past research and experiences, *RURITAGE* has identified 6 Systemic Innovation Areas, namely; Pilgrimage, Resilience, Sustainable Local Food Production, Integrated Landscape Management, Migration and Art & Festival, and 11 Cross-cutting Themes, which represent the ways in which cultural heritage acts as a driver for the regeneration of rural areas and their economic, social and environmental development.

Through the analysis of 13 selected Role Models (i.e. rural communities that have demonstrably and successfully pursued a heritage-led regeneration within one of the 6 Systemic Innovation Areas), *RURITAGE* will support the co-creation and implementation of heritage-led regeneration strategies in 6 Replicators (i.e. rural communities that replicate the heritage-led regeneration strategies of the Role Models to fit their particular contexts).

The Centre for Systems Solutions has been chosen for the design and development of social simulations within the project. The project partnership is planned to last until 2022.

The project received funding from the European Union's *Horizon 2020* research and innovation programme, under the grant agreement No 776465.



KEY EVENTS

MARCH

RURITAGE TRAINING WORKSHOP: FROM SEED TO SAPLING, THE FIRST STEP IN GROWING THE RURITAGE KNOWLEDGE TREE IN VALLADOLID, SPAIN

More than 70 consortium members from the *RURITAGE* project took part in the *Ruritania game* workshop in March. Representing Replicators, Role Models, Knowledge Facilitators, and other Ruritage partners, the 70 participants were split and took part in three simultaneous game sessions.

In the Orange game session with Amanda, participants focused mostly on balancing their investments in tourism and workforce development. In the Green session with Michał, participants focused largely on citizen satisfaction. In the Pink session with Piotr, participants managed to take on invest-

ments in tourism, citizen satisfaction, and disaster risk management.

Each participant came away with a deeper understanding of the *RURITAGE* project goals around rural regeneration and building resilience based on cultural heritage.

Afterwards, the representatives of each Replicator were trained. They used the game as one of the first activities at their Rural Heritage Hubs, with the goal of introducing the competing themes of tourism, workforce development, brand development, and disaster risk management as part of their regeneration plans.





SERIOUS GAME EVENT AT THE REPLICATORS' HUB IN MARCHE REGION

12 local stakeholders came together on Saturday evening, May 11, to play *Ruritania*! A little skeptical at first, players quickly immersed themselves in decision-making. They quickly realized they had to become more strategic about how they grew their *Ruritania* to ensure they had enough available workers. In the end, the participants expressed how well the game reflected the real world and how they needed to consider the system when doing their development planning.



RURITAGE WORKSHOP FOR MODERATORS AND WORKSHOP WITH STAKEHOLDERS IN IZMIR, TURKEY

The first workshop was aimed at teaching moderators how to use and lead the game as well as the debriefing after the simulation. The second workshop was conducted by a team of already trained moderators. It was led in Turkish and was attended by local stakeholders. The goal was to introduce the audience to the *RURITAGE* project and build a shared understanding of local problems through the *Ruritania* game.



RURITAGE WORKSHOP IN KARAVANKE, AUSTRIA

15 local stakeholders, Geopark employees and students gathered on Friday evening, May 17 to play *Ruritania*. Players eagerly began to make their first decisions — mainly on building more tourist attractions. They quickly realized, however, that they didn't have the infrastructure in place for attracting more tourists and had to become more strategic about how they grew their *Ruritania*. The very rich debriefing conversation, which followed, led to active brainstorming of solutions to apply to building the pilgrimage route in the geopark.



MODERATOR TRAINING AND PUBLIC WORKSHOP WITH RURITANIA GAME IN NORWAY

9 local stakeholders came together on Tuesday evening, May 21, to play the roles of representatives of the government of *Ruritania*. At the beginning, the players were a bit distant, but they quickly got involved in the decision making processes — especially decisions regarding the development of local businesses. During the debriefing session, participants realized that, in the game, they prioritized investments in tourism over local production and paid little attention to training of the underqualified workforce. Nevertheless, their impression of the simulation was very positive and many of them expressed interest in playing it again with new groups!



MODERATOR TRAINING AND PUBLIC WORKSHOP WITH RURITANIA GAME IN THE GEO-NATURPARK BERGSTRASSE-ODENWALD, GERMANY

The game was attended by 15 participants with different backgrounds — local stakeholders, employees and students. Players quickly realized that the way to develop *Ruritania* and ensure the needs of its population is to cooperate on setting goals and making decisions. Here is a quote from one of them: “I wish that the real world worked more like in the game - I like how we cooperated”.

RURITAGE WORKSHOP IN SLOVENIA

The first workshop was aimed at teaching moderators how to use and conduct the game and the debriefing session after the simulation. The second workshop was conducted with local stakeholders in Slovenian by the team of moderators. The goal was to introduce the audience to the *RURITAGE* project and build a shared understanding of local problems through the social simulation — *Ruritania game*.

RURITAGE DEVELOPMENT WORKSHOP IN CRETE, GREECE

The Development Workshop gave an opportunity for several consortium partners to present the progress on their work, mostly related to IT tools. Replicators and Role Models were able to speak with *RURITAGE* investors and exchange knowledge and experience with each other. Amanda Anthony presented the *RURITAGE* promo video (which was shared on the UNESCO and *RURITAGE* websites), the *Ruritania game* session video (which included footage from the May game sessions), and the lessons learned from the stakeholder engagement processes. She also gave a brief preview of the next steps. ICLEI confirmed that the *RURITAGE* promo video (with footage from Spain) had been viewed over 3000 times, making it the post with the highest reach in the *RURITAGE* project.

NAURU GAME

FOR ACTIVE CITIZENSHIP OF EUROPE

Duration: **2017 - 2019**

Project coordinator/contact: **Aleksandra Solińska-Nowak**

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The two-year project *Nauru Game for Active Citizenship of Europe* was funded by the European Union within the *Erasmus+* programme. It was implemented from February 2017 to January 2019 in partnership with the Rogers Foundation for Person-Centred Education (Hungary) and TANDEM n.o. (Slovakia). The main objective of the project was to shape citizens' attitudes and increase the awareness of social participation, sustainable development and climate change among young citizens of Europe. To reach these aims, the partnership developed innovative Internet tools — a multiplayer Internet game and an e-learning platform. In 2017/2018, informational events for educators and test events were held in all three partner countries. In 2018/2019, trainings for future moderators were organized in Poland, Slovakia and Hungary, reaching 148 educators altogether.

This project was funded with support from the European Commission.



KEY EVENTS

JANUARY



TEACHER WORKSHOP AT KISKUNHALASI REFORMÁTUS KOLLÉGIUM SZILÁDY ÁRON GIMNÁZIUM

It had been the first time that the Rogers Foundation went outside of Budapest for a New Shores workshop! The organization had come into contact with one of the school leaders of Szilády Áron Gimnázium in Kiskunhalas (Southern Hungary) during a conference in November — things quickly escalated, and the Rogers Foundation was invited to lead a teacher training workshop there. The Rogers Foundation's executive director, Levente Turóczi traveled to Kiskunhalas on January 14 2019, and led the New Shores workshop for 14 members of their staff. They played the game and discussed its relevance for their school. As they said, they enjoyed the workshop very much and would use the game on a daily basis.



STUDENT WORKSHOP AT THE ROGERS PERSON-CENTRED PRIMARY SCHOOL IN KISKUNHALAS, HUNGARY

Just a couple of days before the official end of the *Nauru* project, the Rogers Foundation managed to reach one important goal: they took *New Shores* to the Rogers Person-Centred Primary School. The roots of the school and the Foundation are connected, thus Zsuzsa from The Rogers Foundation was very happy to visit the kids. On January 28, 2019 a group of 14-15-year-olds join the *New Shores* workshop. They had only 30 minutes for the session, but even this short time was enough to introduce the game and have a great first impression of it. The kids really liked the game, and their headteacher obliged to start a discussion about the foundations of democratic societies.

PIONEERS INTO PRACTICE

Contact: **Michał Pająk**

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The Centre for Systems Solutions has been part of Climate-KIC's *Pioneers into Practice* programme since 2013. During this time, it acted both as a sending and hosting organization. It provided placements for Pioneers from various European countries, including the United Kingdom, Germany, and Hungary.

Since 2014, the Centre for Systems Solutions has also been involved in mentoring activities within *Pioneers into Practice* programme. Michał Pająk took up the role of Climate-KIC Regional Coach. His responsibilities involve guidance and counseling in Pioneers' Regional Assignment. He conducts workshops on Transition Theory and helps Pioneers introduce its principles into their work.

During this collaboration, multiple games developed and applied by the Centre for Systems Solutions were used at *Pioneers into Practice* workshops, including *Lords of the Valley*, *Climate Game*, and *Amoeba*.

The project is implemented within the Climate-KIC partnership, funded by the European Commission. Climate-KIC (Climate Knowledge and Innovation Community) is a Europe's largest public-private innovation partnership focused on climate change, consisting of dynamic companies, the best academic institutions, and the public sector.

KEY EVENTS

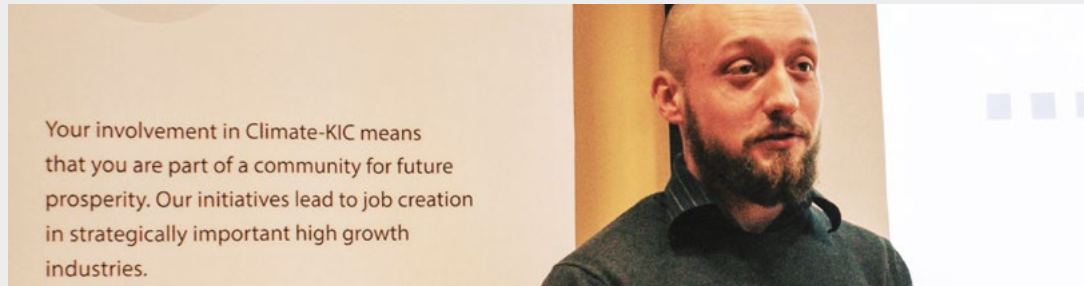
MAY



PIONEERS INTO PRACTICE 2019 — WORKSHOP IN WARSAW

The 2019 Edition of the *Pioneers into Practice* programme started with the Introductory Workshop in Warsaw. Its goal was to introduce the pioneers into the programme and its methodology as well as create teams that would work on the group assignments. Michal Pajak from the Centre for Systems Solutions was co-facilitating the training as a Regional Coach.

NOVEMBER



PIONEERS INTO PRACTICE WORKSHOP

The second *Pioneers into Practice* workshop planned for 2019 took place in November. The goal of the workshop was to provide participants with a different perspective at the *PiP*'s methodology and the pioneers' achievements. The workshop was also an opportunity to network and forge a new relationships. Michal Pajak from the Centre for Systems Solutions was co-facilitating the training as a Regional Coach.

SUSTAINABLE MANAGEMENT OF WATER AND FISH RESOURCES (SUSFISH+)

Duration: **June 2017 - May 2019**

Contact: **Michalina Kułakowska**

e-mail: **michalina.kulakowska@systemssolutions.org**

The *Sustainable Management of Water and Fish Resources (SUSFISH+)* project was led by a consortium of the Österreichische Austauschdienst (Austria), the Austrian Partnership Programme in Higher Education and Research for Development (Austria), the University of Natural Resources and Life Sciences (Austria), University of Vienna (Austria), Institute for Environmental and Agricultural Research (Burkina Faso), University of Ouagadougou (Burkina Faso), Polytechnic University of Bobo-Dioulasso (Burkina Faso), International Union for Conservation of Nature, General Directorate for Fish Resources (Burkina Faso), and the Ministry of Environment and Fish Resources (Burkina Faso).

The main goal of the project was to produce reliable knowledge and improve policies, management, research and education related to fisheries. The project focused on the Nakambe (White Volta) basin in Burkina Faso, which faces important development and environmental challenges. The Centre for Systems Solutions was tasked with designing and facilitating the Nakambe basin strategic simulation, which would further engage stakeholders in the process of identifying the water- and fish sector-related issues in Burkina Faso.



KEY EVENTS

FEBRUARY

NAKAMBE STRATEGIC SIMULATION IN OUAGADOUGOU, BURKINA FASO

When the *SUSFISH+* project was coming to the end, Piotr Magnuszewski participated in the project's final meeting in the Ouagadougou, Burkina Faso.

Piotr, together with our partners from BOKU (University of Natural Resources and Life Sciences), Vienna University and University of Ouagadougou, facilitated two sessions of the Nakambe strategic simulation. During the first day of the meeting, students and young researchers were able to play the simulation and challenge themselves with creating future visions for the whole basin. The second day with Nakambe simulation created an opportunity for addressing questions and problems raised by important stakeholders groups from the basin.

Both workshops were very engaging for the participants and provoked lively discussion about the future of the fish resource management in Burkina Faso.



ARRE

ACCELERATING THE REBOOTING OF REGIONAL ECONOMIES VIA A SUSTAINABLE DEVELOPMENT GOALS SIMULATION GAME

Duration: **July 2018 - June 2019**

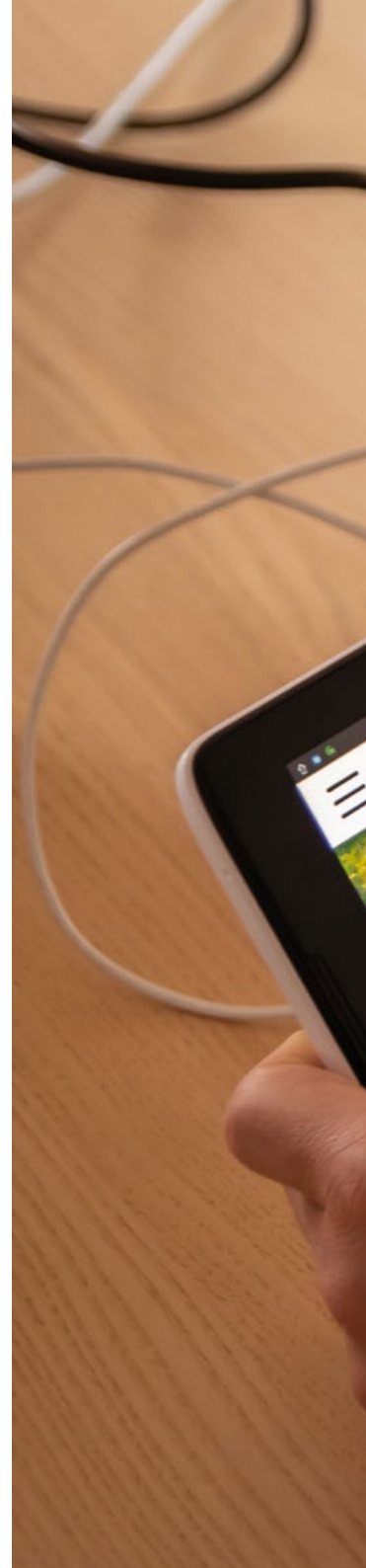
Contact: **Jakub Damurski**

e-mail: **jakub.damurski@systemssolutions.org**

The ARRE project was funded as part of the Climate-KIC *Spotlight* program. It was a one-year project that aimed at developing and implementing a three-day online course entitled *Teaching sustainability – Using simulation to reach the SDGs in regional transformation*. The course was developed in 2018 and was targeted at trainers, educators, academics, business owners, NGOs, public administration managers and scientists who were interested in adopting an innovative game-based approach to communication about climate change and the transition to a sustainable economy. Via various blended learning methods (videos, webinars and immersion in an exciting online simulation), participants gained practical knowledge and skills how to prepare and conduct a transformative learning experience using *The World's Future Online* simulation.

The World's Future Online is a social simulation, based on the 17 Sustainable Development Goals (SDGs), and set in the context of global climate change. As the leaders of three economically diversified countries, players embark on a difficult task to ensure their fictional nations a more sustainable and fair future. Thanks to the dynamics of direct interactions among players, the experiential environment of the simulation reveals the complexity behind social, economic and environmental systems, highlighting the potential trade-offs and synergies that emerge while collectively pursuing the SDGs.

The project was implemented within the Climate-KIC partnership, funded by the European Commission. Climate-KIC (Climate Knowledge and Innovation Community) is Europe's largest public-private innovation partnership focused on climate change, consisting of dynamic companies, the best academic institutions, and the public sector.





KEY EVENTS

JANUARY

ARRE RECRUITMENT - TEACHING SUSTAINABILITY - USING SIMULATION TO REACH THE SDGs IN REGIONAL TRANSFORMATION

The recruitment for an online course *Teaching sustainability — Using simulation to reach the SDGs in regional transformation* was launched in January 2019. Foremost, we were looking for trainers and educators who wanted to learn effective methods to promote knowledge about climate change among their target audiences. Secondly, we also aimed at recruiting business owners interested in reaching a balance between profitability and ecology and other people willing to better understand what the Sustainable Development Goals are and how they relate to daily life. Finally, we selected 16 participants from all over the world (Germany, United Kingdom, Spain, Hungary, Cyprus, Singapore, Spain, Italy, Slovenia, Malaysia, United States, Estonia), having different backgrounds and motivations.

FEBRUARY

TEACHING SUSTAINABILITY - USING SIMULATION TO REACH THE SDGs IN REGIONAL TRANSFORMATION

This two-day webinar provided participants an opportunity to play the new online adaptation of the popular social simulation, *The World's Future Online*. On the first day of the webinar/workshop, participants adopted the roles of department heads from three countries: Kenorland, Vespugia and Laurentia and worked together (sometimes) to achieve their goals. On the second day of the workshop, participants took part in moderator training for the simulation, which gave them an inside look at the game design, tips for moderation, and strategies for running workshops with it.

DEEP DEMONSTRATION FORGING RESILIENCE

Duration: **June 2019 - December 2019**

Contact: **Anna Książczak**

e-mail: **anna.ksiazczak@systemssolutions.org**



CRS is one of the cross-cutting partners in the Climate KIC project — *Deep Demonstration Forging Resilience*. The Forging Resilient Regions Deep Demonstration is focused on the transformation of a cohort of vulnerable regions in Europe from hazard-by-hazard risk reduction practices to a state where people, communities, and systems are able to withstand and bounce back from shocks, persist through slow-onset stresses and transform through crises. Cross-cutting partners support the regions of Andalusia, Nouvelle Aquitaine, the Dolomites and Glasgow in building forging resilience and empowering the systems innovation approach.

CRS carries out this project together with the Austrian partner IIASA (International Institute for Applied Systems Analysis), where they are jointly responsible for submitting proposals and carrying out activities. Both organizations participate in the workshops organized as part of the project and support regions by providing various tools and methods in all project phases — intent, frame, portfolio and learning (according to systems innovation methodology).

The project is implemented within the Climate-KIC partnership, funded by the European Commission. Climate-KIC (Climate Knowledge and Innovation Community) is Europe's largest public-private innovation partnership focused on climate change, consisting of dynamic companies, the best academic institutions, and the public sector.



SEPTEMBER



EXPLORATIVE EXCHANGE: FORGING RESILIENCE WORKSHOP IN SEVILLE, SPAIN

The two-day workshop and half-day project partner meeting focused on introducing a number of methods to representatives of the three regions currently involved in the *Deep Demonstrations* project — Andalusia, Nouvelle-Aquitaine, and Dolomites — as well as some future potential partners from other Climate KIC projects (Cyprus, Malta, Glasgow). These methods included causal loop diagrams, using humor and art in strategic planning and stakeholder engagement, legislative theatre, warm data lab, virtual reality, and social simulation. The *RESILLAND* social simulation was split across two days, with the introduction and negotiations happening the first day and the consequences being shown the second day. The participants took on roles of local civil society, local business and local government and invested in projects which they hoped would build their resilience to the more extreme weather resulting from climate change, including floods, droughts, heatwaves and forest fires.

NOVEMBER



DEEP DEMONSTRATION FORGING RESILIENCE WORKSHOP IN FELTRE, ITALY

The meeting aimed at strengthening the joint cooperation of Climate KIC, cross-cutting partners and the regions (Dolomites, Andalusia and Nouvelle-Aquitaine). The workshop touched on issues such as evaluation of the project work carried out, challenges and obstacles raised by regional representatives and proposed solutions on how to overcome them. Cross-cutting partners proposed to the regions methods and tools that help them to shape the vision and create the roadmap, engage the stakeholders. We offered support to regions by preparing the strategic simulations that aim at analyzing the current situation (including major risks) and, as a next step, developing pathways to resilient futures (as perceived by stakeholders). At the beginning of the new year, specific dates for the workshops will be set.

It was a great pleasure to meet all the people involved in the project in person and plan further activities in the next phases of the deep demonstration process!

KEY EVENTS

ADDRESSING ENERGY TRANSITION GAPS IN CLIMATE AND ENERGY MODEL REGIONS OF AUSTRIA THROUGH POLICY CO-DESIGN

Duration: **June 2017 - May 2019**

Contact: **Michał Pająk**

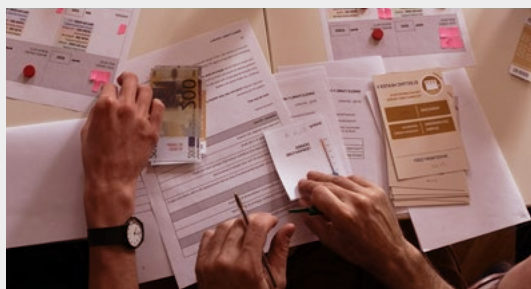
e-mail: **michal.pajak@systemssolutions.org**



The two-year project was funded by the Austrian Climate Research Program (ACRP). It has been implemented since June 2017 by the International Institute for Applied Systems Analysis in partnership with The Wegener Centre for Climate and Global Change. The main objective of the project was to analyze the existing policy implementation gaps in Austria's Climate and Energy Models (CEMs) program. The analysis was carried out from three different angles and aimed to further accelerate Austria's transition to a low-carbon future. The first angle focused on the underlying contextual factors, including overarching governance landscape and heterogeneous actor group motivation. The second one considered energy transition as a collective action problem. The third angle took into account user-experience and design considerations that facilitate voluntary actions. To meet the project goals, we conducted interviews with stakeholders and map the context of the energy transition in CEM Baden and CEM Freistadt. This data was used to create simulations that address the specific challenges of these two regions, enabled local stakeholders to reflect on their current situation and explore potential solutions to their current problems. In this project, policy exercises were combined with design thinking workshops that helped stakeholders work on the solutions for their current challenges.



FEBRUARY



PROTOTYPE TEST OF SUSTAINABLE URBAN HEATING SIMULATION AT IIASA

Piotr Magnuszewski and our partners at the International Institute for Applied Systems Analysis tested the newest version of the *Sustainable Urban Heating Simulation* which was created for the *CoDesign* project. We invited researchers from IIASA to work together on lowering the CO₂ emissions from heating in a small city modeled after an average Austrian city. The short but interesting test helped us in improving many aspects of the simulation.

MARCH



TESTING AN ADVANCED PROTOTYPE OF SUSTAINABLE URBAN HEATING SIMULATION (SUHS) IN GRAZ, AUSTRIA

Team including Piotr Magnuszewski, Jenan Irshaid and Junko Mochizuki with the support from Marta Magnuszewska, hosted a social simulation workshop at the Wegener Center for Climate and Global Change at University of Graz.

The *Sustainable Urban Heating Simulation (SUHS)* has been designed by the Centre for Systems Solutions in collaboration with the IIASA team. The *SUHS* represents sustainability transition challenges of a typical Austrian urban city, characterized by biophysical, regulatory, and economic barriers to adoption of low and zero emission heating options. Participants of this event included local representatives of E5 initiative, student and faculty members of University of Graz.

KEY EVENTS

SUSTAIN

GAME-BASED LEARNING ON URBAN SUSTAINABILITY

Duration: **2017 - 2020**

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The objective of the *SUSTAIN* project is to commence and promote sustainable literacy among students of higher education (and young people in general) through an innovative and student-centered education programme.

In the *SUSTAIN* project, the Centre for Systems Solutions is tasked with translating the simulation models into the game elements, mechanics and playing scenarios. The result of this “translation” will be summarized in an e-book. Furthermore, we will prepare a state-of-the-art board game that deals with sustainability issues.

This project was funded from the European Commission’s grant.



KEY EVENTS

JANUARY



SUSTAIN PROJECT MEETING IN WROCLAW

The 3rd transnational meeting of the *SUSTAIN* project took place in Wroclaw, Poland. On January 10-11, CRS hosted partners from Greece, Italy, and Romania. One of the main goals of the meeting was to monitor the progress in tasks and test the first prototype of the *SUSTAIN* simulation.

JULY



SUSTAIN TRANSNATIONAL MEETING IN ROME

The Rome meeting of the *SUSTAIN Erasmus+* project took place in Rome, Italy on July 4-6, 2019. The meeting was hosted by the project partner System Dynamics Italian Chapter (SYDIC) at the Link Campus University premises. Its main objective was to exchange ideas on outputs' improvements and share updates on the progress in the project. Michalina Kulakowska and Bartosz Naprawa participated in the meeting as the representatives of the Centre for Systems Solutions to give their input on the first prototype of the *SUSTAIN* board game presented by the Ergo Ludo Editions.

NOVEMBER



START OF THE SUSTAIN COURSE AT THE UNIVERSITY OF MACEDONIA, GREECE

The University of Macedonia, Thessaloniki, Greece introduced the pilot *SUSTAIN – Game-Based Learning on Urban Sustainability* course! The course dealt with transportation sustainability, societal metabolism and decision making in the urban context. The course contained materials prepared by all the *SUSTAIN* project partners, including the Centre for Systems Solutions, who created the first design of the *SUSTAIN* board game, developed further by the Ergo Ludo Editions.

GAMES4SUSTAINABILITY

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The *Games4Sustainability* platform is a guide to games and social simulations that can be used in the sustainability education and transition planning contexts.

The *Games4Sustainability* blog collects a variety of success stories on how sustainability professionals, academics and organizations make use of social simulations and games in their areas of activity. The *Gamepedia*, meanwhile, enables users to find a perfect match for their needs from among 100+ games and simulations, which are categorized by The Sustainable Development Goals they address.





DEVELOPMENT OF THE CENTRE FOR SYSTEMS SOLUTIONS IN POLAND

Project coordinator/contact: **Magdalena Liszka**
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The project, implemented thanks to the financial support from The Sendzimir Foundation, includes the following activities: Development of social and strategic simulations and other systems thinking tools to improve sustainable development education; workshops to facilitate dialogue on the management of adaptive social and ecological systems; data collection and analysis; financial and administrative management; and IT services.

The team involved in the project includes Magdalena Liszka, Jakub Damurski, Piotr Magnuszewski, and Łukasz Jarząbek.



SOCIAL AND STRATEGIC SIMULATIONS

The World's Future Online session. Wrocław, October 2019. See page 34 for more info about the simulation.



THE WORLD'S FUTURE GAME ONLINE

Number of players: **9 - 34**

Duration: **2-3h + 1h debriefing**

Requirements: **web connection, at least 9 mobile devices, one computer for moderator**



In 2015, the global community set 17 major targets for the year 2030. Called the Sustainable Development Goals (SDGs), their aim is to end poverty, protect the planet and secure prosperity for all.

The *World's Future Game Online* is an interactive mobile role-playing simulation which enables players to face the great challenges of our time: How to use limited resources and still achieve the SDGs? Is it possible to meet competing needs without trade-offs? Can food production provide for all and

have no negative effects on essential natural ecosystems? How can we increase our efforts to adapt to and mitigate climate change, at the same time generating enough energy for all? And what role do we – consumers, producers, governments and NGOs – play in the implementation of the goals?

You can shape the future of this micro-world and its inhabitants. Each player takes on a unique role in this complex global landscape. The simulation offers space to develop creative strategies and to cooperate

with other participants. It not only simulates the complexity of the global system but also triggers new ideas that can be used to face real-world challenges.

The online version of *The World's Future game* was developed by the Centre for Systems Solutions in collaboration with Wuppertal Institute, Leuphana Universität, and Freie Universität Berlin. It was sponsored by the Deutsche Bundesstiftung Umwelt.

THE PRINCE

Number of players: **60 - 150**

Duration: **3,5h or more**

Requirements: **web connection, 4 laptops for moderators, a printer, a few tables in the size of the game boards, PA system, a camera, projector and big screen, a few chairs**



The newest social simulation in development, *The Prince* will be integrated with a theatre performance inspired by the work of Niccolo Machiavelli. The theatre performance will be directed by Paweł Świątek and staged in September 2019 by Polski Theatre in the underground. Among the players, there are actors who are taking an active part in the simulation and can influence it.

The Prince simulation draws from Polish politics, but the core of the game is universal. Participants take roles of citizens of a fictitious country, organized in clans that run different kinds of enterprises. The citizens can not only grow their businesses, but also run for office and become politicians, or explore other forms of political organization. The parliament creates the law, while the president and ministers take care of the country's development. The country faces many problems such as pollution and inequality.

The goal of the simulation is to recreate the challenges of modern, polarized politics in a safe environment. As participants enter the simulation with their real-life worldviews, they clash and cooperate with players who come from different backgrounds.

The Prince is being developed by Centre for Systems Solutions in collaboration with Polski Theatre in the underground.



RURITANIA GAME

Number of players: **9 (1 per role) - 27 (3 per role)**

Duration: **recommended 3 hours + 45 min debriefing**

Requirements: **1 large table for main game board, either 5 tables for 2 roles each or 9 tables for 1 role each, Moderator table**



As part of the *RURITAGE H2020* project, the Centre for Systems Solutions created a social simulation. It takes place in *Ruritania*, a fictitious rural region that is famous for its rich cultural heritage (including a pilgrimage route or beautiful vineyards) and areas of outstanding natural beauty. At the same time, however, it faces problems of depopulation and migration. Located in a river valley, it's also prone to flooding.

Players become leaders of the region and have to figure out how to turn the area's cultural and natural heritage into drivers for a sustainable development. At their disposal, they have a number of possible projects.

Players decide which projects to implement, deal with the consequences of both their actions and external events, and try to adopt the best possible strategy in an uncertain and changing environment.

The simulation allows participants to look into one of the possible futures and see what would happen as a result of their decisions.

GŁĘBICE

Number of players: **12 - 36**

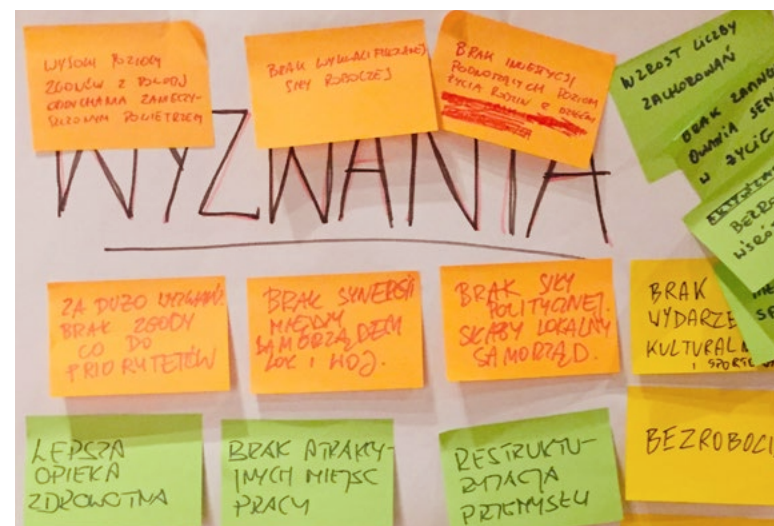
Duration: **3h + 1h debriefing**

Requirements: **2 large tables for main game board, 11 small tables for one role each, Moderator table, 2-3 flipcharts**

Głębice represents a typical Upper Silesian city, e.g. Rybnik. It includes post-mining areas and facilities, vacant buildings, and one operating mine. There are also typical city buildings and infrastructure, such as school, hospital, community center, roads or public transport facilities. The history of *Głębice* is strongly rooted in the mining culture. Like every post-mining city, *Głębice* struggles with depopulation, lack of prospects among young people, the deteriorating health of citizens exposed to air pollution and the unattractive city landscape, which does not attract newcomers.

The players step into the roles of representatives of the local government — the municipal and the voivodeship office, the chamber of industry and commerce, the local non-governmental organizations or the ministry. In the first stage of the simulation, the participants are asked to write columns for the local newspaper, *Kurier Głębicki*. It is a special, future issue of the paper to be printed in 2050, so their task is to draft a prosperous and green vision of *Głębice* in 30 years from now. Over the next rounds, players implement various projects that are supposed to make their visions real. They may focus on the revitalization of post-mining areas, activation of the local population, or the development of education and business institutions. The projects may also aim to reduce smog and pollution, and related effects (e.g. lung diseases).

Głębice is a social simulation that was created as part of the *Just Transformations* project. EIT Climate-KIC's *Just Transformations* is one of eight *Deep Demonstrations* designed to bring fresh thinking and bold experimentation into Europe's transition. It focuses on the particular challenges and opportunities related to transition in regions of Europe still dependent on coal and heavy industry.

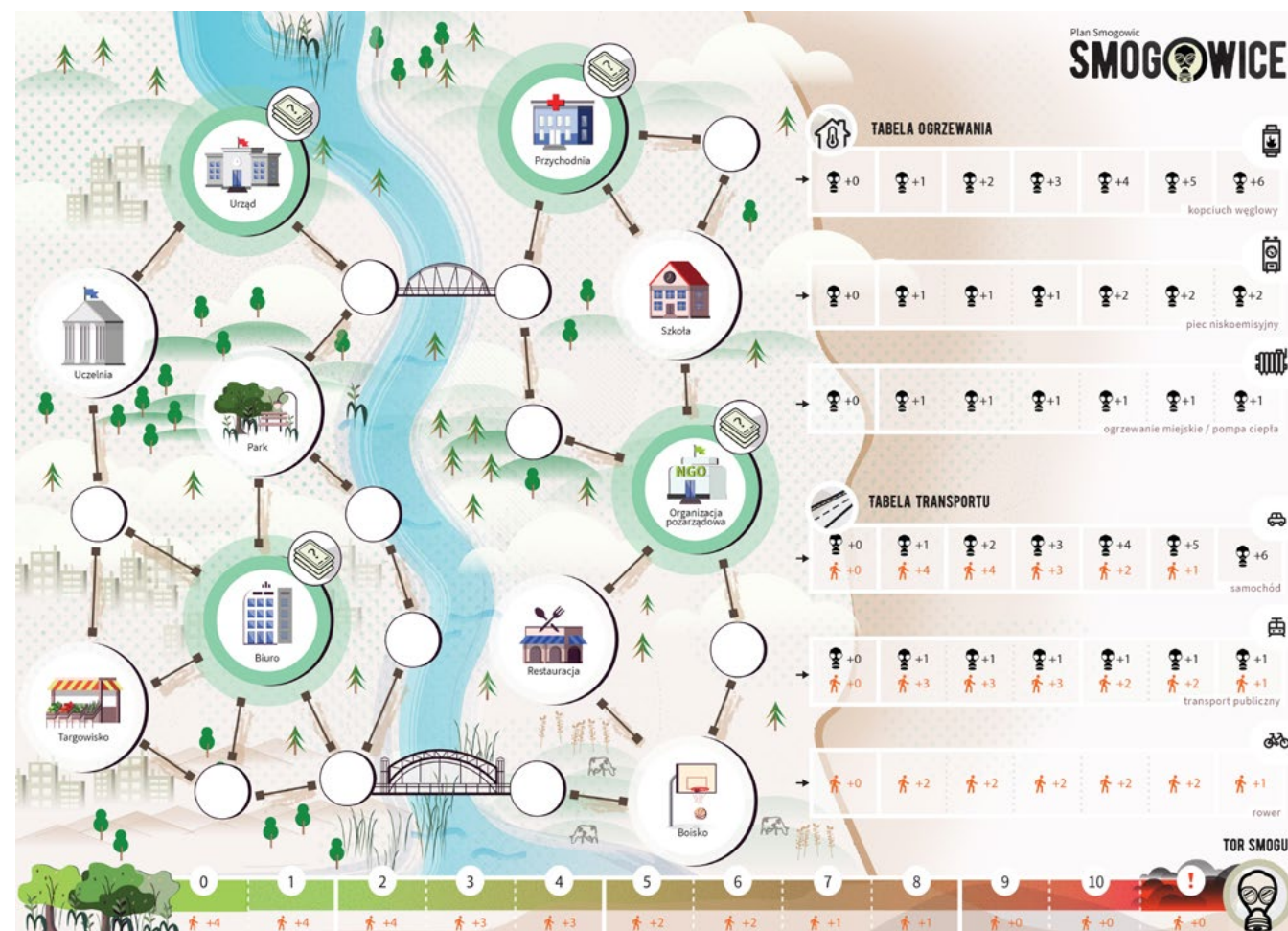


SMOGOWICE

Number of players: **6 - 30**

Duration: **45 minutes**

Requirements: **Smogowice board game set**



Smogowice is a simple and short board game focused on smog and its impacts on the everyday lives of various groups.

Smogowice represents a typical medium city with surrounding rural areas. In the game, smog levels are affected by emissions from transport and heating facilities used by citizens. Players take on the roles of various city residents and make daily decisions regarding their lifestyles.

The game does not have one clearly defined goal – it gives players the freedom to follow their priorities. The future of the city and its surroundings will depend on their actions. *Smogowice* was designed to be used in the classroom setting and can be easily facilitated by any teacher. The game was developed for Fundacja EkoRozwoju, in collaboration with Dolny Śląsk, Instytut Rozwoju Terytorialnego, Krakowski Alarm Smogowy, thanks to the funding from Fundusze Europejskie, Rzeczpospolita Polska, Dolny Śląsk, Unia Europejska (Europejski Fundusz Rozwoju Regionalnego), WWF and Wojewódzki Fundusz Ochrony Środowiska i Gospodarki Wodnej we Wrocławiu.

CASCADIA

Number of players: **9 - 30**

Duration: **2h + 1h debriefing**

Requirements: **6 tables**



The *CASCADIA* simulation puts participants in the roles of the three fictional countries' representatives. As the climate crisis progresses, the countries face increasingly difficult challenges. Intense natural hazards and other cascading impacts of climate change (including migration, food crisis, pollution, or transboundary conflicts) have to be quickly addressed to avoid further escalation. The *CASCADIA* simulation was developed for the *CASCADES* project kick-off in Potsdam.

RESILLAND SOCIAL SIMULATION

Number of players: **~28**

Duration: **3h + 1h debriefing**

Requirements: **one large table, 6 additional tables**



In the simulation, players approach the map of a region split in two by a river. The game design elements, hexes, that are located on the map, refer to different types of infrastructure (school, clinic, hotel, and local communication) and landscape (e.g. forests or fields). The participants step into the roles that correspond to the real-life problem-owners in the *Deep Demonstration* process. There is an Environmental NGO, the Local Society Association, the Agriculture Association, the Local Chamber of Commerce and the Climate Change Office of the Local Government.

The region may be occasionally affected by the climate change impacts — floods, heatwaves, and other unforeseen events. During the simulation, participants invest in different project in order to build resilience — their goal is to effectively adapt the region to rising global temperatures and a more unpredictable climate. These projects were inspired by the Climate-KIC *Deep Demonstration* process, where stakeholders may submit their ideas related to resilience building of their regions. At the end of each round, the evaluation of the investments made is carried out. In this way, the participants of the simulation have the opportunity to virtually test the feasibility of their ideas.



NAKAMBE BASIN SIMULATION

Number of players: **up to 40**

Duration: **4h + 1h debriefing**

Requirements: **a few tables in the size of the game boards**



Nakambe Basin Simulation is a strategic simulation that combines interactive scenarios, role-playing, and game-like mechanisms. It is realistic, based on real water and fish data, yet it provides a safe environment for better understanding the specific challenges that stakeholders face. With the innovative use of physical objects which support a process of systematic “discovery” of interlinkages that rule the Nakambe Basin, stakeholders gain a unique outlook into potential solutions for those challenges. The simulation exercise is divided into three main parts, in which stakeholders look at the present and explore various futures for the Nakambe Basin.

The main goals for the simulation were achieving enhanced and shared understanding of the implications of different investments in the basin, and partnerships to support the fish and water management in the Nakambe basin in Burkina Faso.

Nakambe Basin Simulation was developed by the Centre for Systems Solutions in the framework of the *SUSFISH+* project funded by OEAD and APPEAR.

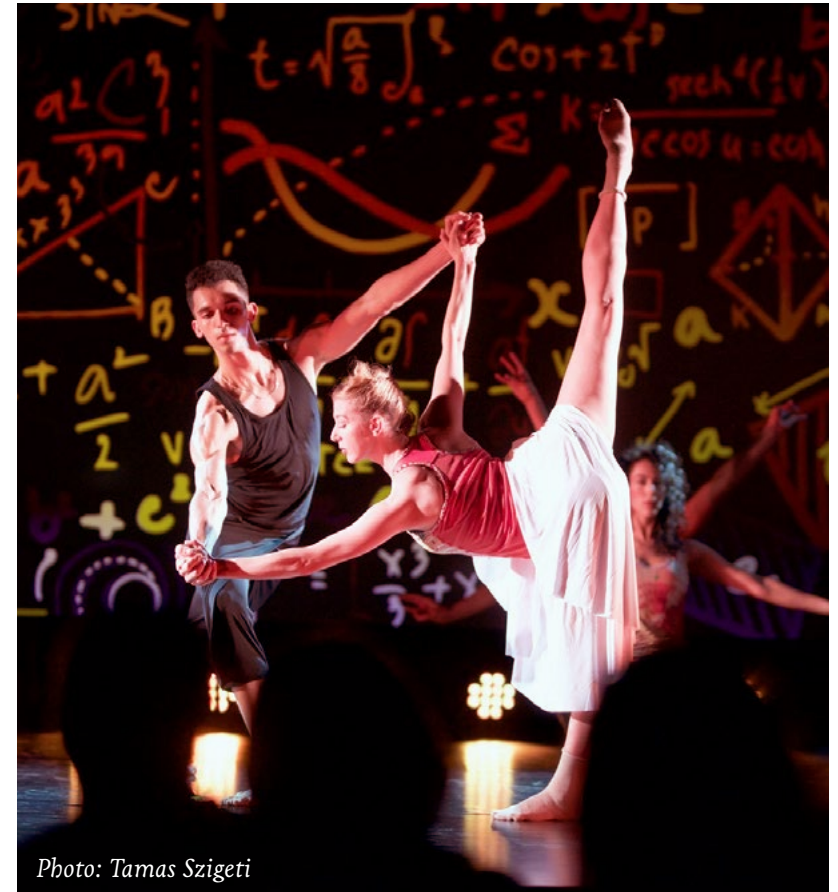
DANCING WITH THE FUTURE

Duration: **1 h**



Dancing with the Future, a fruit of the collaboration between the IIASA Science and Art project and the Program of Evolutionary Dynamics at Harvard University pushes the boundaries of art and science, fusing dance, evolutionary dynamics, and an interactive game designed by Piotr Magnuszewski, IIASA research scholar and Science Director in the Center for Systems Solutions. In this production, dancers and scientists explore the mechanisms of cooperation and investigate

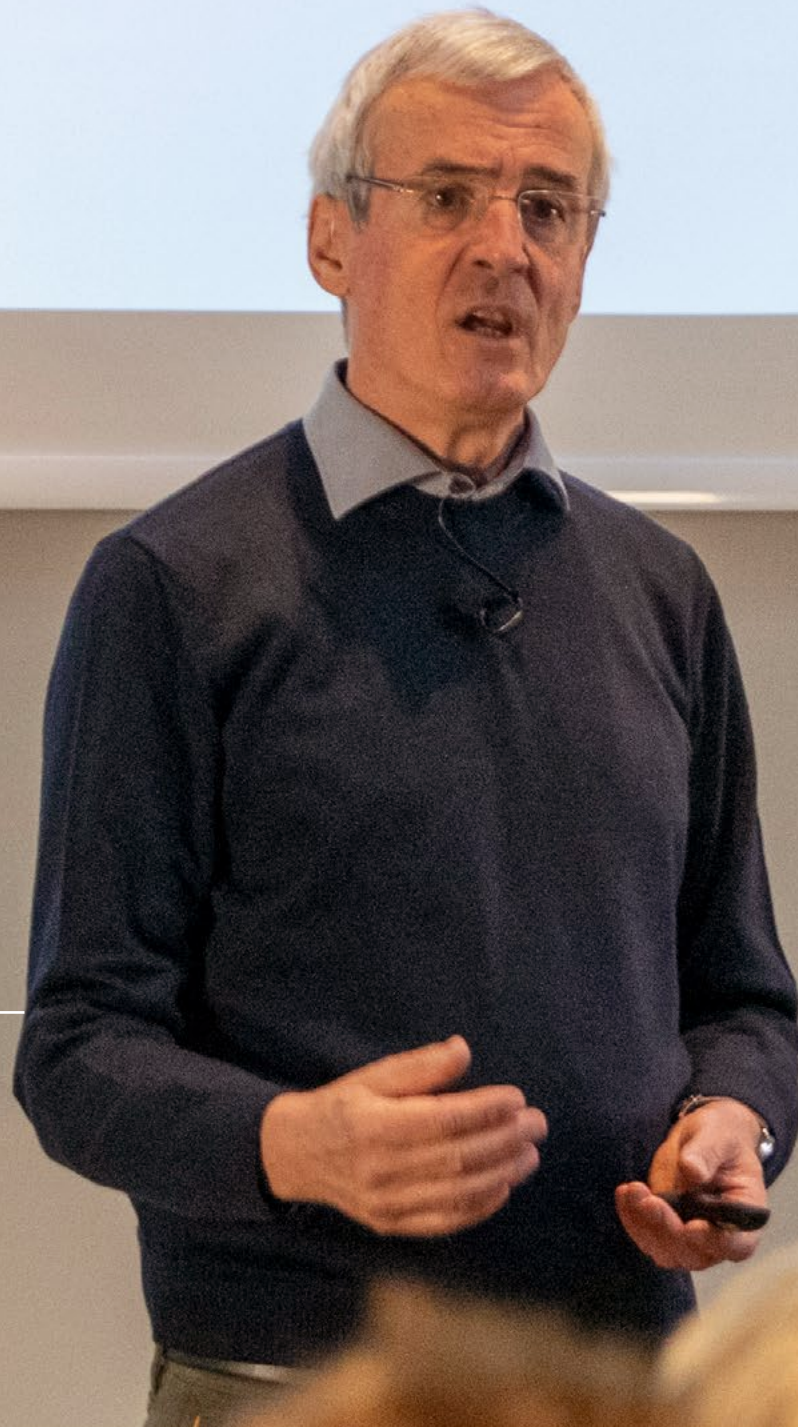
a question that is at the heart of all sustainable development, yet remains widely elusive because it entails a moral component that cannot easily be assessed: are humans able to cooperate with future generations? A stage game invites the audience to participate in order to find out whether it has the capacity to leave enough resources behind for future generations. Project is led by Gloria Benedikt, dancer, choreographer, and IIASA Project Leader for Science and Arts.





OTHER EVENTS

Jan Sendzimir gives a lecture about „tools and concepts for adapting to global change“ Wrocław, October 2019. More on page 51.



JANUARY

IIASA-BOKU LECTURE SERIES: “DELIVERING ON THE SUSTAINABLE DEVELOPMENT GOALS: SYSTEMS ANALYTICAL PERSPECTIVES ON STRATEGIES AND TRADE-OFFS”

The lecture series introduced systems analytical research addressing individual or multiple SDGs. Researchers across disciplines are rediscovering systems analytical approaches to address complex problems. In their broadest sense, they allow for an interdisciplinary integration of theories, concepts and methods, and serve particularly well to investigate the interactions between SDGs. The aim of the lectures was not to teach how to apply each method, but to provide enough information for students to navigate the discourse on systems analysis, to recognize systemic patterns in societal issues, and to be able to identify appropriate methods to solve and illustrate such patterns.

As part of the conference, Piotr Magnuszewski held a presentation on *Navigating complexity through social simulations*.

FEBRUARY

KA2 NOW - INNOVATION IN YOUTH WORK IN BERLIN, GERMANY

After 5 years of *Erasmus+ Youth in Action*, a time came to summarize the results and good practices in the Youth Sector. Between 20 and 22 January 2019, the KA2 NOW Conference *Innovation in Youth Work* took place in Berlin. This was the first event of this type in the history of the *Erasmus+ Youth in Action*. During two and half days, the conference gathered more than 100 representatives of the implemented, ongoing and newly launched innovative youth projects under KA2 Strategic Partnerships. Among them, there was also a representative of the Centre for Systems Solutions!

During the project market, organized as part of the conference, Aleksandra Solińska-Nowak had the opportunity to present the results of the *New Shores - Game for Democracy*. At her stall, people could play the game, read the workshop scenario or ask any question that came to their minds. Combined with inspiring presentations, seminars and time for quality conversations, the conference helped participants better understand the program and exchange good practices in the Youth Sector!

The conference was organized in cooperation with the *Erasmus+ Youth in Action* National Agencies of Belgium-Flanders, Estonia and Germany.



OTHER EVENTS

APRIL

THE WORLD'S FUTURE WORKSHOP IN BRUSSELS



A group of European Parliament employees — from departments of fisheries, gender equality, research and more — gathered to get a better understanding of the Sustainable Development Goals through playing *The World's Future*. At the beginning, the players were very eager to negotiate and look for a shared vision for their three regions. However, while Kenorland pursued a slow approach to growth, Vesputia and

Laurentia struggled to fulfill basic food and energy needs. The debriefing focused on the difficulty of negotiation, the decisions which led to crises and the representation of research and development in the game. Participants later praised the simulation for simplifying the interconnections between the SDGs but said they would like to see improvements in certain areas of the game.

NEW SHORES AT GREEN DAYS 2019, WROCLAW



On April 17, the CRS team was pleased to lead the *New Shores* session for lecturers and students of the Wrocław University of Economics. It was held as part of the *Green Days* event organized by the University of Economics in cooperation with Green Team and Enactus to celebrate *Earth Day*. In addition to the *New Shores* session, the schedule included many attractive meetings and lectures about the challenges faced by our planet. We would like to thank the Wrocław University of Economics for the invitation.

MAY

NEXUS GAME AT THE 5TH TARGETED REGIONAL WORKSHOP FOR GLOBAL ENVIRONMENT FACILITY'S (GEF) INTERNATIONAL WATERS (IW) PROJECTS IN AFRICA, GABORONE, BOTSWANA

Together with the International Institute for Applied Systems Analysis's ISWEL project, CRS organized the *Nexus Game* workshop for Managers of Global Environment Facility (GEF) International Waters (IW) Projects in Africa.

Piotr Magnuszewski, who represented both IIASA and the Centre for Systems Solutions, facilitated the game and the discussion afterward. As always during the *Nexus Game* workshop, participants had a chance to face the real-life challenges linked to the transboundary water management, and look at them from various perspectives.

The workshop was held as part of the *5th Targeted Regional Workshop* and took place in Gaborone, May 28-31, 2019. The event was organized jointly by the International Waters Learning Exchange and Resource Network (IW:LEARN) and the Southern African Development Community Groundwater Management Institute (SADC-GMI) and focused on Water-Energy-Food-Ecosystem Nexus, Groundwater Governance, Legal and Institutional Frameworks, Sustainable Financing and Creating Investable Projects, Economic Valuation, and Water Funds.



JUNE

NEXUS GAME AT OFSE

OFSE organized a training workshop for representatives of development agencies and development consultants on using innovative strategies — namely, social simulation — to jumpstart the stakeholder participation process. Participants played the *Nexus Game* in the morning and then spent the afternoon debriefing about their experience with the game and learning about the theoretical underpinnings of social simulation. Participants praised the game as being engaging but also asked thoughtful questions about how and when the game should be integrated into projects — at the start? At the end? And also how and who should be invited. There were many questions about whether the right stakeholders would be in the room for the game and whether they would behave in a way that they normally would for their organization, or whether they would be immersed in the game and behave in a different way. Participants also asked about how the game experience could be used further - whether or not the engagement would lead to better scenario planning, or whether it would be thought of as an independent aspect of the project.

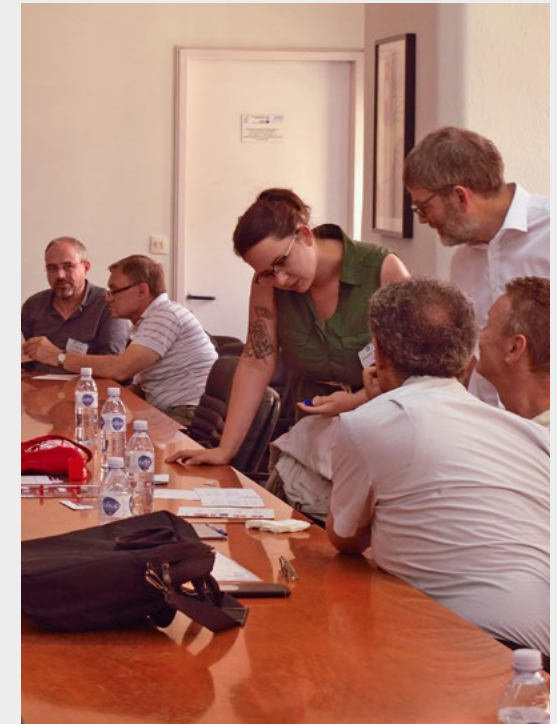


OTHER EVENTS



MANAGEMENT COMMITTEE MEETING AND WORKSHOP OF LAND4FLOOD COST ACTION. TOWARDS INCREASED STAKEHOLDER ENGAGEMENT IN FLOOD RISK MANAGEMENT

Michalina Kulakowska was invited to give a presentation on the social simulations and serious gaming for stakeholder engagement at the *Land4Flood Cost* project meeting at the University of Macedonia in Thessaloniki, Greece. After presentation, participants of the meeting had a chance to take part in one of such social simulations — *Flood Resilience Game*, which was also moderated by Michalina. The *Flood Resilience Game* is set in an area exposed to seasonal floods. Players take on the roles of community members (workers, farmers, entrepreneurs, financial services agents), local government and water board officials.



NEW SHORES AS PART OF THE PORTAL PROJECT



PORTAL - The Integrated Development Program of the Wrocław University of Economics aims at improving the competences of students and staff in the higher education system. As part of the project, students and lecturers of the Wrocław University of Economics have the opportunity to participate in innovative training courses and workshops that enhance communication, professional, entrepreneurial, IT and analytical skills. On June 12, 2019, CRS was invited to contribute to the project and organize the *New Shores* game session. During the three-hour workshop, we not only played the game but also discussed current civilization threats and tried to think about how our decisions affect the future of the global community.

ABOUT NEW SHORES IN THE MAGAZINE “EUROPA DLA AKTYWNYCH”

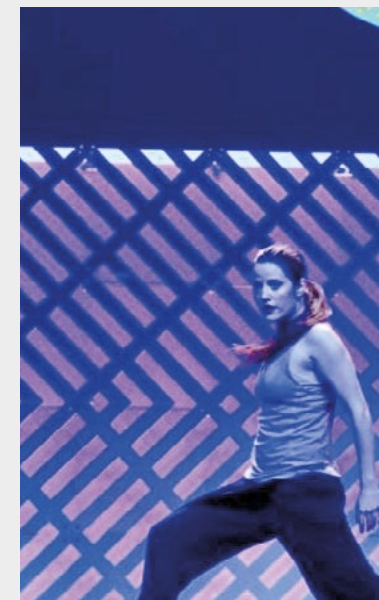


Europa dla aktywnych is a quarterly for beneficiaries of educational and youth programs implemented by the Foundation for the Development of the Education System. The magazine addresses issues related to youth policy of the European Union, intercultural education and youth information. In the latest, June issue, we had the pleasure to present our multi-player game *New Shores*, which was created as part of the *Erasmus+* program coordinated by FRSE.

ETHICS LESSON WITH NEW SHORES IN WROCŁAW



How to involve young people and motivate them to think about their future? Librarians from the Primary School No. 113 in Wrocław found a good solution—they organized an extraordinary ethics lesson. Rather than preparing a lecture or a presentation, they invited students for an exciting session of one of our simulations, *New Shores - a Game of Democracy*. Isolated from civilization, the players were struggling to develop a prosperous community on a fictional island. They soon discovered that “it is very difficult to reconcile economic growth with the concern for the environment.” Some also admitted that „ethics is not about good intentions. What counts is joint action.” We are impressed by such valuable insights and we hope that the lesson drawn from the experience will stay with the participants for a long time!



OTHER EVENTS

JULY

DANCING WITH THE FUTURE IN DETROIT, USA AND LAXENBURG, AUSTRIA



Source: twitter.com/sustainbrands

The *Dancing with the Future* performance, co-created and co-played by Piotr Magnuszewski from CRS, was invited for the two big events in Detroit, USA and Laxenburg, Austria. The first initiative, the *Sustainable Brands Convenes Global Brand Leaders* at SB'19 Detroit, is the largest community gathering of global brand and sustainability leaders dedicated to advancing social and environmental innovation.

THE WORLD'S FUTURE ONLINE - CLIMATE KIC JOURNEY CYPRUS

As part of the Climate KIC Journey, Amanda Anthony and Stelios Yiatros ran two simultaneous games with *The World's Future Online* to introduce the SDGs and help Journey participants get familiar with systems thinking in practice. The 40 Journey participants were split into 2 groups (20 each), meaning 2 were assigned to each role, with one World's Future Organization and one Journalist for each game. While players were eager to move towards a future with clean energy and enough resources for all, they quickly realized the difficulty of the food-water-energy nexus — providing for their industrial and agricultural needs, as well as their population needs. Although some groups were able to invest in gender equality and green goods & services, they were not able to reforest and reduce carbon dioxide levels. The debriefing was done together and provided important insights on the SDG system, managing the tradeoffs and synergies of achieving the goals, and the tendency of governments to be inwardly focused. Participants reflected on the economic realities of climate change and international aid, and came away understanding the need for cooperation and strategic investment.



SEPTEMBER

CASCADES KICKOFF MEETING IN POTSDAM, GERMANY



The three-day kickoff meeting in Potsdam focused on introducing the draft project plans for each workpackage and helping partners get to know each other. On the first afternoon, the *CASCADIA* simulation session was held, putting participants in the roles of three countries affected by climate change and related cascading impacts. Faced by intense natural hazards and other impacts (like migration), participants tried to adapt to the uncertain future. The *CASCADIA* strategic simulation will be used as the feature product of Workpackage 7, led by CRS.

THE WORLD'S FUTURE IN KOBLENZ



The 6th Annual Trifels Summer School focused on Systems Thinking and Global Challenges. Attendees from around the world participated in 5 days of lectures and workshops focused on building a systems approach to sustainability. On the third day, students participated in a game session of *The World's Future*. The following day, there were lectures on serious game design for systems thinking and teaching and additional reflection periods on the lessons learned.

THE PREMIERE OF „THE PRINCE” AT THE POLSKI THEATER IN THE UNDERGROUND

A cultural and social experiment was created by CRS in collaboration with the Polski Theater in the underground. Using simulation and digital analysis technologies, the creators of *The Prince*, inspired by Niccolo Machiavelli's treatise, had created a meticulously defined country and handed it over to the viewers. Nikolonia's fate depends on the decisions taken during the game, and each action brings about specific effects. In this show, no one remains a passive viewer, because even inaction can lead to very significant changes.

TURIN SUMMER SCHOOL - CRS WORKSHOPS

The international summer school is a joint project of Politecnico di Torino and UCLA. This edition focused on the analysis and creation of serious games as a tool for learning. Lukasz Jarzabek from CRS was invited to run a game design workshop during the summer school. The students also played the *New Shores* social simulation.

OCTOBER

NEW SHORES - UNIVERSITY OF MACEDONIA

In October, Michalina Kulakowska facilitated an online session of the *New Shores* game for greek students.

With Jason Papathanasiou serving as the in-classroom moderator, Michalina introduced around 10 students of the University of Macedonia to the *New Shores*. In their efforts to develop a small island society without negative consequences for the environment, students quickly set strict rules.

GLOBAL EDUCATION GAMES FESTIVAL „ZROZUMIEĆ ŚWIAT PRZES GRY” IN TORUŃ, POLAND

The main purpose of the festival was to exchange the ideas, learn from each other, and take part in inspiring discussions about the games for global education. Michalina Kulakowska from CRS had a chance to participate in an expert group meeting and talk about how to create and use educational games in schools.

NEXUS GAME FOR GLOBAL WATER PARTNERSHIP-MEDITERRANEAN (GWP-MED) IN TIRANA, ALBANIA



The 3rd Regional Nexus Roundtable in Tirana promoted the Nexus approach in South East Europe (SEE). It was attended by more than 80 stakeholders from all 6 economies of SEE, including representatives of Ministries and institutions involved in water management, energy production, agriculture, and environmental protection.

Participants engaged in a 4-hour long *Nexus Game*, a social simulation focused on the challenges of the transboundary resource management.

ENERGY TRANSITION GAME FOR WINDNODE PROJECT IN BERLIN

Over 35 professionals participated in the *Energy Transition Game* on October 24. The event was held in CityLab in Berlin as part of the WindNODE Challenge 2019. The game presented the complexity of the energy transition (e.g. growing energy demand and energy prices) but also gave the participants space to try out innovative approaches.

TOOLS AND CONCEPTS FOR ADAPTING TO GLOBAL CHANGE

37 people took part in a two-day workshop organized by the Centre for Systems Solutions. On the first day, participants took part in the interactive role-playing simulation *The World's Future*. On the following day, they listened to interesting lectures by Jan Sendzimir, exploring the topics of system thinking, the dynamics of socio-ecological systems (SES), resilience and adaptive management.



WORKSHOPS „SOCIAL SIMULATIONS AS A TOOL FOR IMPLEMENTING SUSTAINABLE DEVELOPMENT” IN KRAKÓW



This workshop combined experimental learning with discussion on game-based approach to education. In the first part of the workshop, participants had the opportunity to play the *Nexus Game* — a social simulation focused on the interlinkages between food, energy and water sectors. In the second part, a series of presentations and discussions were held that revised the possible applications of social simulations for education, research, and public policy.

NOVEMBER

ENERGY TRANSITION GAME FOR TU DELFT ENERGY CLUB



On November 22, 2019 Michał Pająk and Aleksandra Solińska-Nowak had an opportunity to lead a session of *Nexus Game* at TU Delft Energy Club, the Netherlands. The game session gathered more than 20 students and experts in the energy transition. For a couple of hours, the participants explored the challenges and opportunities connected with the transition to less coal-dependent societies. The findings were further deepened during an inspiring debriefing session.

THE WORLD'S FUTURE WORKSHOP AND TRAINING FOR UNDP JORDAN



UNDP Jordan is one of the pilot countries for the *SDG Impact* program, whose aim is to engage business in pursuing the Sustainable Development Goals and helping them understand the financial benefits that can come from that. They organized two workshops and one training with the social simulation *The World's Future*. The attendees of the game session held on the first day came from local businesses and educational organizations in Jordan. The debriefing focused largely on the system and the interconnections between the goals. The second day was a partnership program

with the American Chamber of Commerce in Jordan, so attendees were largely representatives of business which are either American subsidiaries or are doing work in America. There was also a former ambassador to the US from Jordan. The debriefing focused largely on the opportunities available for those who understand the system. On the morning of the second day, there was a training on how to use *The World's Future*. More than 10 representatives of UNDP Jordan and their partner organizations were trained on the game.

THE WORLD'S FUTURE ONLINE WITH WORLD AFFAIRS COUNCIL

The World Affairs Council of Dallas-Fort Worth is a non-profit organization that aims to increase citizen knowledge of and engagement in international affairs. Besides running events with high-level speakers, they also work with more than 70 high schools in the area through the Junior World Affairs Council clubs. The workshop was designed to introduce teachers, students and council members to *The World's Future Online* for future use in high school classrooms (or at least through the JWAC clubs). We played 3 rounds of *TWF Online* and got feedback on the game. Many teachers expressed interest in using the game, and we were invited to participate in their summer school.

CLIMATE-KIC PARTNERS' DAY IN ZABRZE, POLAND

At the Climate-KIC partner meeting in Zabrze, Poland, we invited participants for a short trip to *Głębiec*. They had to first create their vision of the city in 2030 and later try to make it real. The trip ended in 2022, with lower levels of smog and plans to revitalize former post-industrial and post-mining areas.

Kirsten Dunlop, CEO of Climate-KIC, who also participated in the event, gave the presentation about what the deep demonstrations are and about the challenges that cities are facing in the process of transformation.





DANCING AT WORLD SCIENCE FORUM 2019 IN BUDAPEST, HUNGARY



Photo: Tamas Szigeti

Dancing with the Future show was presented at the 2019 edition of the *World Science Forum* held at Hungarian Academy of Sciences, Budapest in November. The *World Science Forum* brings together leading scientists, decision-makers, representatives of the civil society and the media to discuss new challenges facing science in the 21st century.

DECEMBER

NEW SHORES DEMONSTRATION AT THE INSTITUTE OF BANKING IN DUBLIN

On December 10, 2019 Piotr Magnuszewski and Aleksandra Solińska-Nowak met with the representatives of Ernst & Young and the Institute of Banking in Dublin. The objective of the event was to present the potential of social simulations to trigger discussion about responsible finance and the way culture and economy intertwine.

LAUDATO SI AS A PART OF THE EVENT KARKONOSZE – GÓRY ODRADZAJĄCE SIĘ PO KLĘSCIE EKOLOGICZNEJ

Laudato Si, an ecological board game inspired by one of the Pope Francis' encyclicals was played by families during a festival held in the Karkonosze. The game session was led by Damian Dec, a member of the CRS Association.



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