**Market Place of Tools Guide**

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| **Stand Nr 1** | Tool Presentor**: Devaraj de CONDAPPA SEI Associate** | **Language: English and French** |
| **The Stockholm Environment Institute links water, energy and climate change mitigation planning software tools to help policy-makers grapple with the “Water and Energy nexus”**Climate, water and energy are intricately linked, so choices in one sector can often reverberate across the others. In regions that rely heavily on hydropower, energy security depends on water availability. And the water sector requires energy to treat and move water. Policy-makers need to understand the changing dynamics in each sector as well as cross-sector interactions and tradeoffs – the so-called “Water and Energy nexus”. The Stockholm Environment Institute has been working on developing the quantitative modelling platform “WEAP – LEAP” to apply in practice this nexus concept.The *Water Evaluation And Planning* (WEAP) system is used in 170 countries for integrated water resources planning. WEAP models both water demand and water supply, simulating real-world policies, priorities and preferences. The *Long-range Energy Alternatives Planning* (LEAP) system, used in more than 190 countries, is a powerful, versatile software system for integrated energy and greenhouse gas mitigation planning. It is widely used for energy assessments and Low Emission Development Strategies (LEDs), and has been applied in dozens of National Communications on Climate Change to the United Nations. |

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| **Stand Nr 2** | Tool Presentor:**TommasoAbrate, WMO** | **Language: English and Spanish** |
| **The Global Framework for Climate Services** The Global Framework for Climate Services (GFCS) is a global partnership of governments and organizations that produce and use climate information and services. It seeks to enable researchers and the producers and users of information to join forces to improve the quality and quantity of climate services worldwide, particularly in developing countries.The goals of the GFCS are:1. Reducing the vulnerability of society to climate-related hazards through better provision of climate services;
2. Advancing the key global development goals through better provision of climate services;
3. Mainstreaming the use of climate information in decision making. Promoting better uptake, understanding and awareness of the need for climate information and climate services; and demonstrating the value of the services in socio-economic, safety and sustainability terms;
4. Strengthening the engagement of providers and users of climate services. Building relationships between providers and users of climate services at both the technical and decision-making levels; and
5. Maximising the utility of existing climate service infrastructure. Improving coordination, and strengthening and building this infrastructure where needed.
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| **Stand Nr 3** | Tool Presentor: **Caroline SULLIVAN, Southern Cross University, NSW Australia** | **Language: English** |
| **The Climate Vulnerability Index (CVI)**The Earth’s climate and its hydrological cycle are intimately connected. The Climate Vulnerability Index (Sullivan and Meigh, 2005) is a holistic and interdisciplinary tool developed to provide a clearer understanding of how climate impacts on water resources are likely to influence human populations. Based on a participatory multicriteria framework, the CVI is designed as a simple-to-use tool which can be derived largely from existing data. Structured as a composite index, it provides the means by which the distribution of water-related climate impacts on people can be mapped. This means that resources can be directed to those areas where adaptation measures are most needed, and likely to have the greatest impact. The CVI takes account of a wide range of relevant factors clustered within 6 core components, referred to as Global Impact Factors (GIFs). These are:* Geospatial variability,
* Resource quantification,
* Accessibility and property rights,
* Utilisation and economic efficiency,
* Capacity of people and institutions, and
* Ecological integrity maintenance.

After the baseline for current conditions is assessed, scenarios of global change areapplied to evaluate potential future conditions. In this workshop, a demonstration of the CVI to Mongolia is considered, and demonstrated at the provincial scale. Email: caroline.sullivan@scu.edu.au |

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| **Stand Nr 4** | Tool Presentor: **Sarah COMBALBERT, EPAMA** | **Language: English and French** |
| **Communication in the AMICE project** The AMICE project gathers 17 European partners belonging the international Meuse catchment and is funded at third by the Interreg IVB program. Transversal activities of communication permit to federate the partnership and aim also to develop a risk and river culture at the entire catchment scale. Among this communicational activities- that jumbled together are site visits, a website, meetings, a movie, a book translated from Dutch to French, newsletters etc…- a tool for decision-support has been set-up, based on the Wat-a-game concept developed by IRSTEA. This tool has been built as a board game which simulates the French part of the Meuse basin and targets both elected people and public. The complexity of the rules is progressive and the main stakes about quantitative issues of water on the Meuse basin are simulated: flood and low-flows risks, and also aspects about the land-use management (with the possibility to have agricultural or natural areas, urbanized areas and a range of protection facilities). In the last level, public policy’s cards permit to introduce qualitative stakes. The game is both individual and participative purposes: only one player will win according to his richness but all of them are likely to loose if the threshold of the Belgian dissatisfaction, downstream of the basin, reaches a certain level. The sessions can be played with or without a facilitator. |

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| **Stand Nr 5** | Tool Presentor:**Lesya NIKOLAYAVA, ZOIEnvironment Network** | **Language: English and Russian** |
| **Geo information and flood communication as one of the tools for climate change adaptation.**The availability of and access to adequate and timely information are important for efficient water and flood management in the basin, especially in the transboundary context. To improve access to vital information from the entire Dniester river basin, a geographic information system[[1]](#footnote-2) was developed. Based on the same information, the first ever Environmental Atlas of the Dniester[[2]](#footnote-3) was published in cooperation with the riparian states. The Atlas is the first attempt to present the state pf the environment of this transboundary basin in a visual format; it includes over 30 thematic maps, graphics, diagrams and photos. Two automated stations for monitoring the flow of the river were installed in the upper part of the basin with the idea that automated hydrometeorological data are to be increasingly exchanged between the countries. The stations will collect information and transmit it directly to Ukraine’s Dniester-Prut Water Basin Authority in Chernivtsi. In future this information will flow in real-time also to other users, including those located downstream in the Republic of Moldova and the one-million-population city of Odesa in Ukraine. A special study was undertaken to assess the existing capacities, practices and information flows related to communicating flood risks in the Dniester basin at the national, the local and the cross-border levels. The study recommended improvements in delivering information on flood risks and issuing warnings to the population in the Dniester river basin. The findings, discussed in a dedicated workshop with water, hydrometeorological and emergency response agencies of Moldova and Ukraine, will be used to strengthen flood communication locally and nationally, and the exchange of flood information and warnings between the countries.  |

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| **Stand Nr 6** | Tool Presentor:**Bart SWANENVLEUGEL, Flood Wise** | **Language: English** |
| **Cross-border Flood Risk Management is a simulation game**Cross-border Flood Risk Management is a simulation game thatconfronts the playerswith issues thatmayarisewhile managing transboundaryflood risks. It addressesan upstream and downstream country, sharing the sameriverbasin. Each country withit’sspecificcharacteristics. With the game, two different themescanbeaddressed: 1) possibleflood risk management measures; 2) the level of detail of plans that is requiredfor different users. The game is in fact a roleplay, that is designed as a deck of cards. It is playedwithtwo teams of maximum 10 playerseach. Each team representsonecounty. The teams consist of variousnational stakeholders, like ministers, ngo’s andlocalauthorities. They have toagree on a frameworkfor joint flood risk management of the shared riverbasin. In the first part of the game, the teams willdiscuss the national interests at stake end theywilldevelop a strategyfor the internationalconsultations. In the second part, the players of bothcountries/teams will meet and have severalroundstocometoan agreement on the internationalframework.The game sessionwillbeconcludedwith a discussionaboutlessonslearnedregarding cross border cooperation andflood risk management. |

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| **Stand Nr 7** | Tool Presentor:**Ad JEUKEN, Deltares** | **Language: English** |
| **Adaptive Delta Management and the Tipping Point Approach**Typicalquestionsfrom planners regarding adaptation to climate change are: * How can we prioritise actions in times of uncertaintiesandlimited budget?
* How can we make sure that our investments are robustforfutureconditionsandflexibletoadaptif needed?
* How can we keep options open in case we need to adapt to new environmental or societal conditionsandhowcan we capitalizeopportunities?

Thisroundtablewilldescribe a methodfordevelopingsustainable(delta) management plans underchangingconditions. We focus on two concepts for prioritising actions: ‘Adaptation Tipping Points’and‘Adaptation Pathways’andillustratethemwithexperiencefrom Dutch delta management.  |

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| **Stand Nr 8** | Tool Presentor: **Claudia CASAROTTO, Swiss Re** | **Language: English (Ms. Casarotto understands Spanish, but questions will be answered in English)** |
| **Economics of Climate Adaptation**Climateadaptation is an urgent priority for the custodians of nationalandlocaleconomies. Suchdecision-makersask: What is the potentialclimate-relatedlosstooureconomiesandsocieties over the coming decades? How much of thatlosscan we avert, withwhatmeasures? What investment is requiredto fund thosemeasures – andwill the benefits of that investment outweigh the costs?The ECA methodologyprovides a frameworktoproactively manage totalclimate risk, which means:* Assesstoday'sclimate risk;
* Map the economicdevelopmentpathsthat put greaterpopulationandassets at risk;
* Consider the additional risks presentedbyclimate change.

17 studies have been carried out e.g. flash flood risk in Guyana, drought risk toagriculture in Mali, India and China andmultihazard risk in the Caribbean. The studies showedthatexistingclimatepatterns are responsibleforannuallossesbetween 1% and 12% of GDP. The losses are likelyto risk up to 19% of GDP by 2030. Cost-effectiveadaptationmeasurescanpreventanywherebetween 40% and 68% of the expectedeconomicloss in the regionsstudied.ECA's collaborators are: Swiss Re, McKinsey, Global Environment Facility, European Commission, the Rockefeller Foundation, Climate Works, and Standard Chartered Bank. |

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| **Stand Nr 9** | Tool Presentor: **John MATTHEWS, AGWA** | **Language: English** |
| **Movingfrom tools todecisions: The AGWA Decision Support System**How do we make climate-resilientdecisions? The process of diagnosing the realized or potentialrelevance of climate change to water resources management has been inconsistent, and no clear consensus has developedaround best practicesforquestionsregarding the long-term management of water resources foragriculture, water infrastructure, energy, andecosystems. AGWA has targetedtwo levels of water management for the DSS: water planners (working at a basin, national, or transboundary level) and water managers (working at a sub-basin, infrastructure, urban, or protected area level). The AGWA DSS is a still-evolving “meta-tool” thatorganizesclimateadaptationinto the more general AGWA approach, which is a risk-basedmethodologythatfocuses on using “bottom-up” data sources ratherthanclimate models as the basis fordecision making. The AGWA DSS beginswith a process of problemdefinitionandproceedstoevaluating the relativerole of climate change in solvingthatproblem. Fromthere, the DSS focuses on developingalternativestrategiesthat are linkedtogovernanceandpotential financial andeconomicconstraints. The DSS is ultimatelydesignedtobeaniterativeprocess, thatempowers water planners and managers to make systematic, successfuldecisions. |

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| **Stand Nr 10** | Tool Presentor:**RojinaManandhar, UNFCCC** | **Language: English** |
| **Generation and dissemination of relevant knowledge on adaptation and engagement of organizations -Potential role of the Nairobi work programme as a knowledge base under the UNFCCC**In this round table, a brief overview will be provided of the evolving adaptation landscape under the UNFCCC and relevant knowledge and information needs, evolving role of the Nairobi work programme (introduction to the work programme and focus on current outcomes of SBSTA 38), current tools of implementation of the work programme to date in responding to needs from Parties (including engagement of partner organizations, technical workshops, publications, web-based interface, eUpdate).Thiscontextual (oral) presentation could be followed by a round table discussion addressing following questions:1) Views on potential role of the Nairobi work programme as a knowledge base to respond to evolving needs of information and knowledge on adaptation?2) What are the examples of tools to enhance implementation of the work programme?3) How could organizations be more engaged in implementation of activities under the work programme?4) How could organizations benefit by engaging in implementation of activities under the work programme? |

1. <http://82.116.78.174/en/about-geoportal> [↑](#footnote-ref-2)
2. <http://dniester.grida.no/ru/about-project/dniester-env-atlas> [↑](#footnote-ref-3)