Circular Port Projects

Online Webinars 28th-29th April 2020

For the research trajectory of 'Circular (City) Port', initiated by Circular Flanders/OVAM and in collaboration with 1010au and Architecture Workroom Brussels, three online webinars were organized with a selected group of port authorities, practitioners, researchers and cities. In preparation of these webinars, a document with 12 action lines was sent. These action lines bundle the knowledge that was gathered during the trajectory and translate it into strategic opportunities that can be taken by different actors. With this, the research stepped away from solely documenting and gathering knowledge, bundled in the different documents of Lessons Learned. Workbook 1 and Workbook 2, to the search for a more structured approach by initiating strategic thinking and aiming to share knowledge. With this, the focus shifts from looking only at the scale of the 'City Port' to looking generally more at existing and possible 'Circular Port Projects'.

The online webinars tried to define a first moment of this strategic thinking with various port authorities, practitioners, researchers and cities to sharpen the next steps to accelerate the circular transition in (city) ports, with these action lines as a base of discussion. A series of potential outcomes and more concrete steps have been further discussed, setting priorities in envisioning the progression of the transition. This document shows a summary of the reflections, questions and conclusions from the webinars and also sketches a possible plan of action, based on the priorities and urgencies that came forward from the different sessions. By understanding the underlying reasoning and governance agreements, the generation of shared knowledge and the production of some form of collective intelligence around this transition could be made, able to inform a Delta strategy.

| Action Lines & | Port Authorities | City authorities |
|--|--|------------------|
| Learning from present initiatives to steer future changes | The Port of Ostend highlighted the need to bundle and share knowledge on the different ports and practices active in the circular transition. Finding a way to start sharing crucial lessons learned from the field of practices can be a first step to build an exchange between different partitioners. The handbook, as a tool to bundle knowledge, seemed for many present port authorities a fair instrument to bundle together the differentiated tools already present in enhancing the transition. The Port of Amsterdam underlined the potential to use it as an instrument to reach the broader public, by presenting different data and regulations and by setting the frame to see the bigger picture. | |
| Implementing hidden values through regulation | For ports it is hard to understand the effects and impacts that new circular economy practices and initiatives have. The Port of Amsterdam underlined that it is vitally to implement monitoring strategies, focusing on the changing ecosystems, starting from the scale of the port and look at the relation with the corridor, national and European level. | |
| Supporting good practices via innovation-steered investments | | |
| Guiding a mental shift via societal change | For the Port of Ostend, moving toward the new economy means also to understand and develop new kinds of skills and jobs related to new activities. The development of human capital regarding circular economic activities requires the development of new knowledge at the local level. For now the public sector is not in a proactive position regarding this knowledge development, but at the same time private companies are the first movers in this trajectory. | |
| Setting up a strategic common agenda for ports and cities | The Port of Rotterdam sees circular economy as a field to compete on, not only between ports, but also between cities and ports. This transition can only take place if the entire chain is changing together. It is possible to concrete value in a common agenda at the European/Delta level, enhancing collaboration. | |
| Bridging the gap between supra-re- gional goals and local opportunities | The general discussion by all participants highlighted the need for a platform that supports local initiatives, with no decisive power but a more enhancing and supportive power, with collective abilities. | |

| Overview platform | Academics and Experts | National and regional authorities |
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| It is relevant to give an overview perspective. It can serve to pool relevant projects. AIVP sees a potential in developing this tool, by acting as an external reviewer and giving the general picture of the transition at the level of city ports. | From the perspective of Elvira Haezendonck (VUB/UA), building an information database is very crucial, but this would means to have full transparencies on, for examples, flows and the supply chains, but not many businesses seems to be willing to share their specific data. Certainly port authorities can play a major role in demanding transparencies from the different organizations. It is necessary to constitute a database that is often updated, and where regulations can lead to better exchange and build coalitions. It can represent a huge trigger to know which and how coalitions can be formed in a new way by thinking about it with potential business partners. | Gabriëlle van Zoeren, the Manager International Innovation at Rijksdienst voor Ondernement Nederland/International Ondernemen (RVO) highlighted that good examples need to be in place and be looked at to get a sense of ability and awareness that it can be done. These activities are now not clearly seen, and as long as it's under the surface, it will be very hard to see the value and create new economic systems. In this sense, it is important to build a tool to learn from the good practices in the field to steer also behavioral change in the broader society. |
| AIVP suggested that it could be interesting to explore some tools that could start to compare products resulting from circular processes and the one of the linear economy. It can represent a way to show hidden values, by putting a price on the difference. Ksenia Krasnitskaja, project collaborator VRP, stressed the fact that, to expose those hidden values, a short term trajectory needs to be thought out, also as a tool to convince and attract companies. | The academic field can play a key role in defining new measuring and monitoring tools for the impacts of the new economy. Karel Van den Berghe (TU Delft/UGent) and Julie Marin (KU Leuven) defined as first steps the need to focus on the investigation on the kind of values the circular economy transition is bringing to the fore. This would mean not only developing tools measuring economic impacts but also parameters related to the social and environmental impacts. Looking at the valuable elements of the linear economy and steer them toward the circular one was underlined by Ana Luisa Moura (Vereniging Deltametropool) as a way to facilitate the transition, rendering the conversation more mainstream, | The Manager International Innovation at RVO stated that, to create the business case of circular economy, knowledge on true cost ownership is essential. An overview on the barriers that the transition needs to overcome is fundamental, in order to strategize on how to pass those, leading to build up a short term trajectory exposing the different hidden values of circular economy. |
| | | Looking at the meta-question on how finances are now traditionally structured highlight the difficulties in creating a new system if the basic model remains based on the old economy, Jan Zaman, spatial planner from Departement Omgeving by Vlaams Departement Omgeving, argumented. Ports are still strongly dependent on oil based economy, and the investment funds are still focusing on it, stopping the transition to happen. A new investment structure is clearly needed in looking to the shift to circular economy. |
| Important is to invite people of the port to new economic activities and educate them on different levels. For AIVP this can be translated by developing human capital in linking it via education and differentiated pathways of changes, to the circular economy development and its social challenges at the local level. | | Circular Flanders/OVAM highlighted that looking at the new innovations coming from the field of circular economy goes hand in hand with the development of new related job and skills. Many ports have been developing different strategies in this direction. A first step should be to look at how to share this knowledge already generated and at the same time, to investigate further the new skills and jobs related to the city port activities. |
| AIVP saw potential to open the concept of 'port development companies' at the scale of the Delta, as a concept to investigate different co-financing models and co-development of specific projects. | Nadia Casabella (1010au/ULB) states that the circular transition necessitates a stronger collaboration in terms of flow management between the inhabited and the activity areas beyond the modernistic zoning segregation; next to technological innovation, many circular endeavors are labor-intensive and can take advantage of transport costs reduction thanks to proximity, between residential and work locations, but also between the places located in the same supply and value chain. | The ports and cities should be exchanging knowledge on flows, data and strategies, to enhance collaboration. Focusing on the knowledge exchange on specific materials flows seems crucial, in the opinion of the Manager International Innovation at RVO, in leading to the constitution of a roadmap for future business cases. Choosing a common focus point facilitates the building up of common strategies between cities and ports in tackling specific local barriers. |
| Presenting the 'Circular Ports Project' as an example of exchange and common learning seems very interesting in order to implement similar process at the Delta scale. AIVP finds it interesting to use it as a tool to learn from similar regions and to start to build new connections at the European level. | Karel Van den Berghe (TU Delft/UGent) highlighted the important role that regional authorities can play in guiding circular processes, since many different dynamics, flows and actors comes together at that scale. | The Manager of International Innovation at RVO, highlighted that there is a recognisable wish to most ports and cities to make circular economy work. The European Green Deal can represent a lever of support in this transition. There is potential to start up collaborations between the different countries in the Delta, in order to investigate the co-financing of innovative next steps. Circular Flanders/OVAM underlined the fact that a possible platform facilitating exchange at the Delta scale can be value-driven, in order to initiate a building capacity process. |

| တ္ O Action Lines | Port Authorities | City authorities |
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| Finding a neutral ground for all parties to exchange and learn | The Port of Brussels clarified the need to set up a capacity building environment supporting the different port authorities, initiatives and differentiated actors in the process of transition to a circular environment. The Port of Amsterdam together with the Port of Rotterdam voiced the concrete need to pool experience about developing and sharing insights on ongoing circular projects, steering a P2P learning. The building of a neutral platform can be helpful, not only in trying to overcome competitiveness between ports, but also by stimulating ongoing projects with supra-regional support. This can lead to attract and exchange with people from other fields, enlarging the competences and exchange needed in tackling the transition. | |
| Starting a think-tank that puts circularity on the agenda and looks at the next steps | For the Port of Brussels, the bundling of initiatives can represent an opportunity to convince local actors to proceed toward a circular system. In this regard, it seems important to use it as a way to attract and initiate collaboration among different fields of competences in order to envision an overarching strategy. | The think-tank can function as a sounding board for different spatial planning projects, in order to have a pool of experts reflecting on it. In building up this exchange it is possible to relate it on a network, and build a two-way exchange. This seems a key priority for AG Vespa when facilitating the implementation of circular projects. |
| Investigating and imagining the next circular spaces | The Port of Ostend stated that, developing imaginaries for the circular port of the future is important, in order to develop a narrative that can be communicative for the broader communities, by raising awareness and preserve industrial and production activities in the port environment. | AG Vespa highlighted the value of possible new imaginaries that can convince political parties and companies to be on board in the transition. Moreover, at the scale of a specific project, it crucial to involve the neighborhood inhabitants to test further ideas on the ground in a more open and integrate way, via these imaginaries. |
| Indexing vacant, underused and old plots for new circular ideas | The indexing of the spatial opportunities present in each port environment, is something that many port authorities are busy with. At the same time, the Port of Rotterdam signals it as important to map initiatives and spaces in order to further understand the spatial conditions of circular practices. According to the Port of Ostend, it can, on the one hand, define clearly the bigger framework in which the spatial transformation is taking place, highlighting crucial elements to be considered and analyzed further. On the other hand, the Port of Amsterdam sees its interests in starting to clarify the interrelation with the surroundings of the port, and how far the influence of the harbour stretches, possibly recognizing potentials for clusters and corridor development. | |
| Searching for and using the different planning possibilities | In the Brussels Port context, tension between spatial planning and port development is quite present. It is not only real-estate pressure, but it is also about opening up the port area to the city. In the russels context solution are tested, but there is not long term strategy on this. Spaces for experimentation are needed to envision a long term strategy. | |
| Making a multidisciplinary team, with spatial thinkers, to tackle the circular transition | In the Rotterdam port's environment, the spatial view on the economy is very underlighted. To have the integration of the creative view of spatial thinkers would be very valuablen by focusing on imaginative visualization together with the mapping of the opportunities, less in a quantitative way. | Including spatial thinkers needs to be done in strong collaboration with economic experts to know what is feasible and what is not in the first stages. AG Vespa explicits that usually redevelopment means to build up new housing and not economic logics. There is a whole new set of tools to explore as urban planners. |
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| Overview platform | Academics and Experts | National and regional authorities |
|--|---|--|
| AIVP highlighted the potential of a neutral ground to go further than exchange and learn. Potentially it can become a pool of companies and actors that can exchange tools, starting to have a matchmaking function. | Many ports are looking at how circular economy is going to influence their competitiveness, since it will become the new normal. Elvira Haezendonck (VUB, UA) stressed the fact that this exchange can help in revealing the positive sum game of collaboration: everyone wins from it and each can have their specific position. | |
| | Karel Van den Berghe (TU Delft/UGent) positions this exchange as the interface in which we can verify which are the right question to be investigated. It can have a strategic value also in the academic fields. | Circular Flanders/OVAM states that it is difficult to bundle capacities in moving forward the transition toward circular economy. The platform can be seen as a tool to reach capacities and build up the right knowledge to move ahead. |
| Visualization can be considered a tool to steer and enhance changes, especially when we consider port activities that still have a negative connotation in the collective imaginaries. AIVP sees the strength in involving citizens, as it means to make them active parties of the circular economy transition, and building together the future for a productive city. | | |
| | Nadia Casabella (1010au/ULB) stressed the necessity to look at the ecosystem that goes beyond the port authorities territory. The corridor scale, between the city port and the Delta scale, seems a crucial one to investigate further. Even though developing a strategy that would be embraced by several ports located in the Delta region could be considered a big step forward in terms of coordination and the establishment of fruitful synergies, we also need to test, try things out, start pilot projects circularity is still at its infancy and it would be dangerous to define a normative framework that is only sustained by goodwill and insufficiently backed up by concrete experiments. | |
| It is crucial to set up tools to withstand the real estate pressure, from the perspective of AIVP. These in-between transitional spaces are very easy to be bought for real-estate development. A new agreement with urban authorities needs to be foreseen. This sees its translation also in a better coordination between ports and municipal authorities, between planning tools, economic tools and leasing contracts. The first step is to look deeper into the current port activities, and which are their related urban planning barriers. Moreover, the lack of space in the port brings the planning authorities to make choices and give different priorities, highlighted the project collaborator of VRP. | Ana Luisa Moura (Vereniging Deltametropool) augmented that, currently some issues are recognisable in reserving enough spatial flexibility in hotspots for the circular economy. The real-estate pressure is still very dominant in port areas, especially in city-ports, and it makes it difficult to develop spaces for circular experimentation. | |
| | Julie Marin (KULeuven) underlined that many academic researches are busy in investigating the circular economy transition and its related spatial transformations. Important is to look at the infrastructure development in relation with the changing new logistics. Researchers can bring in a series of references and start to build connections regarding the spatial transformation. | From the perspective of Vlaams Department Omgeving, to further accelerate circular economy, new coalitions between spatial planning, innovation and entrepreneurship needs to be started. This would lead to build a complete pathway of transformation and strategies, bringing together all the different pieces and starting to link them together. |
| | | |

The 'Circular Port Projects' online working sessions represented an open moment of verification and collective strategic thinking. It is clear from the many conversations that each port, city and region finds itself at different stages of the transition. Everyone is trying to tackle the shift to the new economy with different processes of learning-bydoing in response to the various local questions. The fact that the overall system of heterogeneous actors, embedded in our port environments, is busy strategizing toward this systemic change of going to a circular mode of operation, clarifies the need for exchange and mutual learning between practices. The experiences, expertises and knowledge gathered from these differentiated local processes can be seen as an opportunity to build a common ground of know-how and of a more structured approach to tackle the circular economy transition together.

As a result of the open discussions in the online webinars, five main 'work packages' could be recognized. They show a first reflection on the 12 action lines developed in the research and on the core arguments and priorities that each actor brought to the fore during the sessions. The five work packages focus on different aspects of the action lines and are seen as crucial first steps that can accelerate the transition to a more circular mode of operation of our port systems.

Creating a learning and capacity-building environment

Overcoming the overall confirmed dispersed knowledge, expertise, projects, etc. by creating an environment where these are bundled, shared and strategized upon.

The circular economy is a vast field that still needs further investigation and experimentation to be fully understood and discovered. Many projects are ongoing, and there is a common feeling that everyone is 'reinventing the wheel'. To achieve a systemic change, the understanding and learning from already existing practices and experimentation in the field of circularity is a first priority. A learning environment in which innovation, technologies and know-how can be gathered and used is crucial. This builds upon the already existing experiences and starts creating a progressive process of

shared knowledge-building. In this way, an annually updated status quaestionis of which initiatives are taking place or are starting up, bundled together in a handbook, along with a peer-to-peer system of exchange can be seen as key components to facilitate the exchange and learning of the many circular modes of operation. It makes it possible to start strategizing beyond the different scales of each projects' mode of operation and aids the many active actors in accelerating the transition to circularity. A peer-to-peer exchange environment is also responding to the need to find a neutral ground in which shared capacity can be built that goes beyond port competitiveness and specific local gains. It tries to steer the positive-sum game for the different parties involved, and builds capacity of planning, business cases, etc. It is a potential tool to constitute a pool of expertise and knowledge that represents an asset that practitioners can rely on to build up new local strategies and circular projects.

2. Supporting and strengthening Circular Port Projects to implementation

The existing and new circular port projects are still in a fragile position. An 'Atelier of Projects' can help support and strengthen the ongoing and upcoming projects.

Port authorities stress the fact that the translation of different learning and innovation on the circular economy into concrete local projects is difficult. Each port environment is busy experimenting and developing new circular projects, without an applicable recipe on how a circular project should function. There is an overall concern that it is a complex and continuous process of trial and error, of learning-by-doing that is going too slow.

There is a need for support in this operation of circular experimentation and project development. An 'Atelier of Projects' can help consider different scales and elements that make the transition process difficult: starting from the need of flexible land management and implementation at the local level to a more comprehensive planning system at the regional scale or even a broader envisioning of circularity at the national or Delta scale. This 'Atelier' should not only focus on new projects, but also on the reuse, restructuring, reform and adaptation of existing spaces and infrastructures.

3. Exploring further a circular system at the Corridor level

Circularity will not be restricted to the boundaries of each port, but will have ecosystems stretching beyond. This local and regional aspect needs further investigation in order to serve the current and future ecosystems of the port.

The transition towards a circular system envisions that the entire economic environment is going to be focused much more on a smaller scale. In essence, this would mean going beyond the isolated port environment and building a specific connection with the hinterland, the living environment and the cities, based around supply and value chains. Therefore, the analysis and development of the circular economy cannot stop at the port borders. In fact, a deeper understanding of the interrelation of the port areas and their surroundings, as well as possible synergies with other fields of production and operations, seem fundamental.

The scale of the Corridor offers a clear opportunity to develop this investigation further. It is a good scale to map opportunities for possible new synergies, to understand flows and actors, to investigate the different kinds of spaces and their connection. For the implementation of a broader circular system, this scale and investigation are a relevant first step. To start envisioning this exploration more concretely, mapping these corridors in search for these opportunities and problems is crucial in order to find a scope of the possibilities.

4. Developing monitoring principles for circularity at the Delta scale

There is still a lot of vagueness on what circularity exactly is and what its new values are. The development of a monitoring principle in collaboration with academics, experts and actors should facilitate the measuring of the circular transition.

It is not easy to go from a linear to a circular economy, especially since the circular mode of operation is measured according to the principles and values of the old economy. The development of new measuring principles goes hand in hand with the monitoring of the circular port projects. International monitoring and measuring at the Delta

scale was one of the key conclusions of the online sessions and could help facilitate the various port strategies and new and old projects.

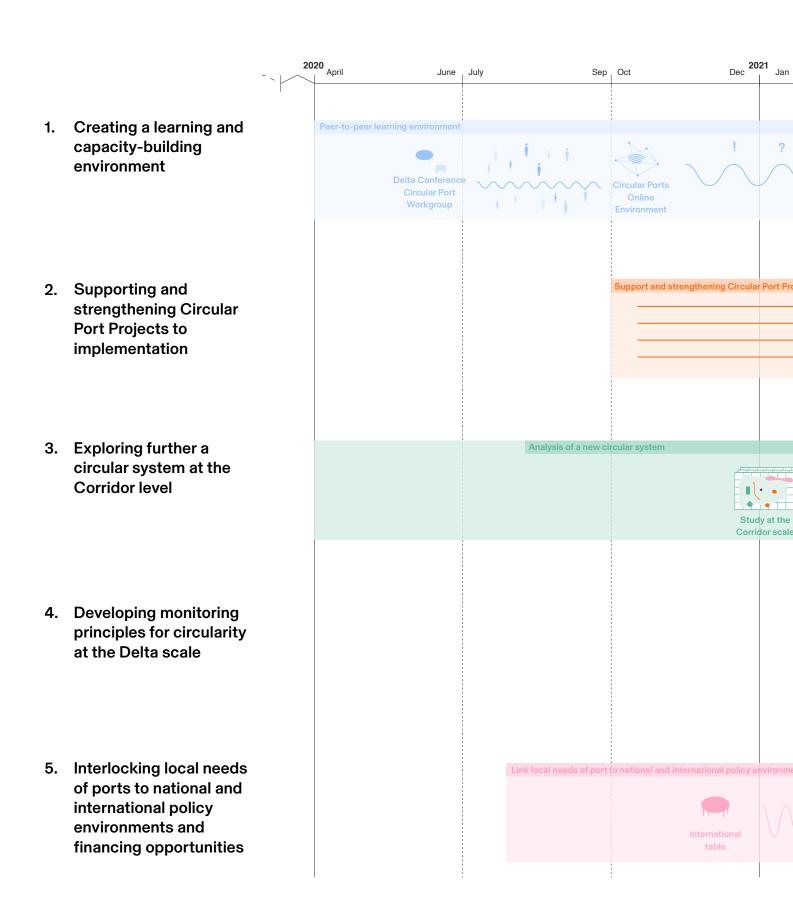
A monitoring system on the Delta scale would observe the development of the different circular ecosystems and measure them in their transition process, while also looking to reinforce them in this process. It can help steer the various port developments towards a circular mode of operation, since the monitoring system shows the legitimacy of the circular transition. The monitoring could help better understand the legislation and policy needed in order to shift to this new economy. In general, emphasis has been put on the fact that a monitoring system on the Delta scale can enhance the development of a structured framework to guide the transition.

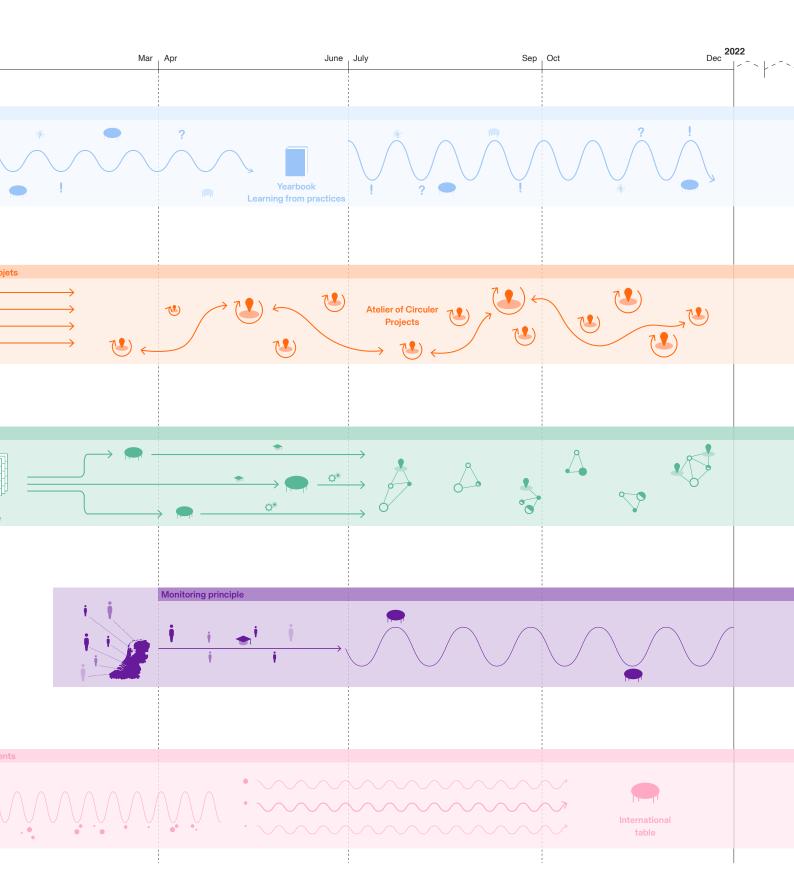
Interlocking local needs of ports to national and international policy environments and financing opportunities

To make this transition happen, there is, on the one hand, an overall call for governance and financial support on a national and international level, while, on the other hand, they formulate on these levels different legislation and goals for circularity. There is a clear need to connect these two ends.

Legislation around the development and goals of the circular economy is usually framed at a higher level. The operationalization and the translation into policies, programmes or specific interventions at the regional and city level never find their way through a clear and linear process. This happens while there is a clear demand for support on the regional and local level from the ports that need links with the diverse national and international policy environments.

Envisioning an international exchange can enhance the definition of shared ambitions by investigating supporting strategies at the Delta scale. Simultaneously, it can take the form of a facilitating body or platform that helps to translate higher policy ambitions into tailored instruments and tools to be implemented at the specific scale of the Delta, the ports' corridor or at the local port or project level. Furthermore, formulating shared goals and ambitions at an international level gives the possibility to collectively investigate the financing opportunities for the implementation of shared projects at the different scale of interest.





Special thanks go to the participants of the 'Circular Port Project' Online Webinars:

Circular Port Projects - Online Webinar 1 - April 28th 2020:

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Circular Port Projects - Online Webinar 3 - April 29th 2020:

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