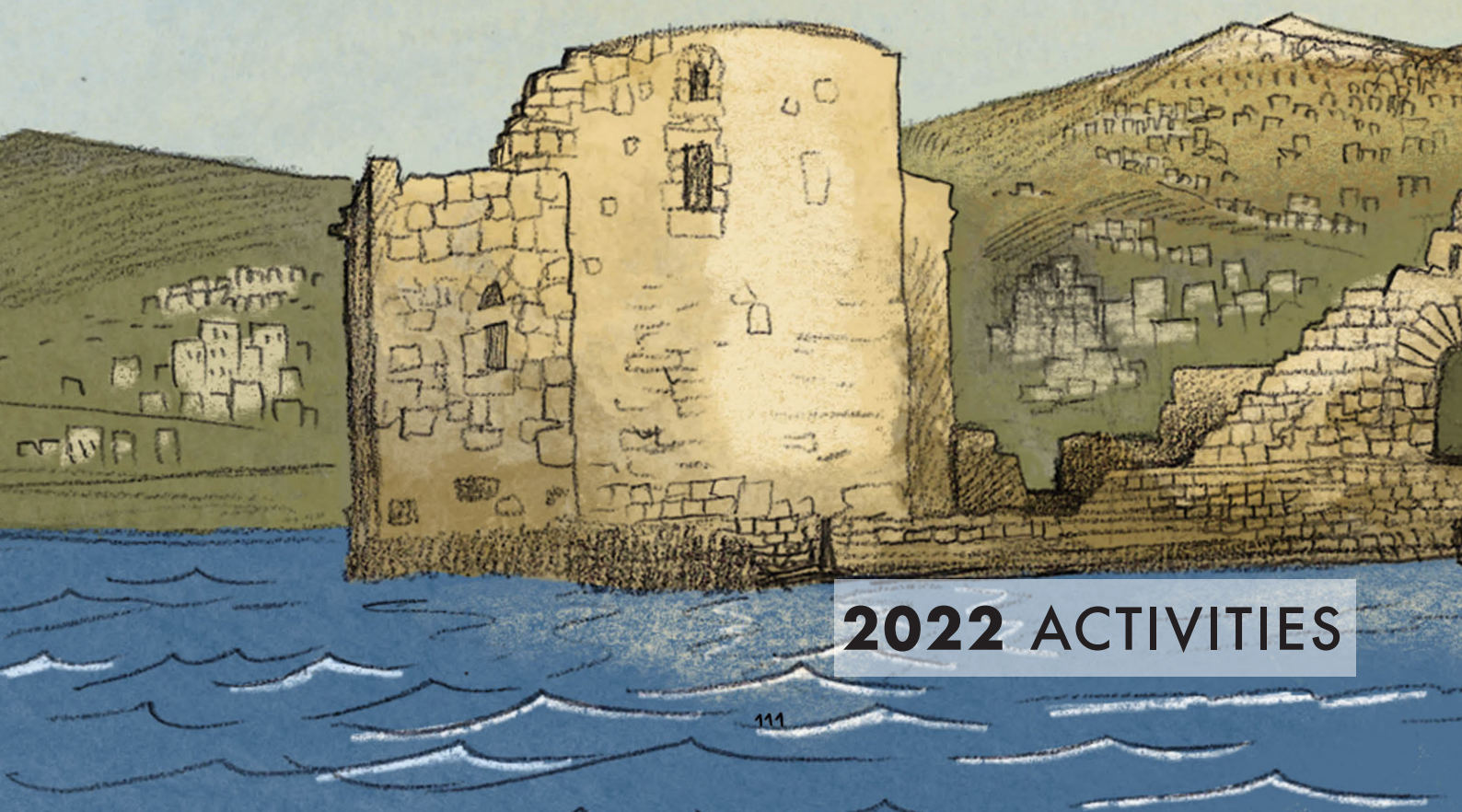




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Scaling up Ambitious Leadership

Learning By Doing Lebanon



2022 ACTIVITIES



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2022 ACTIVITIES

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100% Lebanon: A Green Recovery Vision

Learning by Doing – Annual Report 2022

IndyACT - Lebanon



1. Executive summary

Today, although the Lebanese people thrive for change, they remain trapped in the negativity of the current reality, where hopes are overshadowed by despair, keeping them doubtful and concerned about a wishful plan. From here, driven by potential, necessity and willingness, team Lebanon sustained its work from the previous year with more enthusiasm and positivity. Despite all the political and economic challenges, and despite all the limitations, we managed to launch our project, draft preliminary sectoral storylines, and undergo a series of meetings, workshops and scrums as a prelude to initiating a national dialogue for the sake of one unified long-term vision, the 100% Lebanon vision.

The key elements we managed to accomplish in 2022 include both theoretical and technical aspects:

- Agreement on program with all sectoral experts and signing contracts
- Developing drafts for all sectoral storylines, except the tourism sector
- Conducting 2 scrums for two of the draft storylines (circular economy and transport)
- Start modeling exercise with the Climate Vulnerable Forum secretariat on the impact of sectoral targets on economic indicators
- Trigger the development of Lebanon's LEDS and start its drafting process

2. Project Description

As mentioned in our previous report, the current situation, in spite of being dire, is a good opportunity to revitalize Lebanon's economy, in addition to achieving a better quality of life due to environmental and social benefits. Thus, this project provides a way forward to address the current crisis by providing a long-term vision based on the green economy concept. It initiates a dialogue among all key stakeholders at all levels to work towards one common call, 100% Lebanon, the land of diversity - diversity at all levels.

The project, throughout all its different phases (scrums, modelling, mainstreaming, etc.) will feed into Lebanon's low emission development strategy (LEDS), to complement the already conducted work by the Ministry of Environment. This will ensure that Lebanon's LEDS is based on an ambitious vision that provides a good life for all Lebanese, as well as achieve the long-term goals of the SDGs and the Paris Agreement, especially the 1.5 limit.

The green economy vision drafted for Lebanon provides an overall framework on how Lebanon can harness all the potential socioeconomic benefits, while still achieving the goals of the SDGs, the Paris Climate Agreement, the Convention of Biological Diversity and few other international



commitments. This vision was developed not only from a sustainability lens, but from on what is best economically for the country, while ensuring a good life for all. The vision makes the case that the green economy concept is the best approach to achieve these socioeconomic benefits. The developed document is aimed to initiate a national debate that would unify all Lebanese under a common vision for the future.

To contribute to the above mentioned, and in line with the LbD's core goals, IndyACT team has focused on tackling a holistic approach to cover the political, social and economic constraints that hinder initiatives and limit Lebanon's Recovery. Then, the research team dived in into six main sectors to come up with concrete strategies sprouting from a unified vision adopted by the most. The six sectors are: 1) Energy, 2) Transport, 3) Agriculture and Water, 4) Tourism, 5) Consumption and Production (circular economy), and 6) Sustainable Finance.

3. LBD Project team and key stakeholders

The "Lebanon" team includes members of two NGOs "IndyACT" and "Green Mind", along with the national team "Ministry of Environment". And a group of 6 experts (independent consultants):

- IndyACT & Green Mind: Leading on the process and ensuring grassroots, local community, local authority and marginalized groups input, since these are the people we as NGOs directly and extensively work with on daily basis.
- Climate change unit - Ministry of Environment: Providing government endorsement, integration into the LEDS framework, Consultation, Review, resource people, and recommendation.
- The 6 experts (independent consultants) are:
 - Jean Stephan (Lebanese University, FAO Lebanon). He is an expert on Lebanon's Agriculture & Water sector. He provided the parameters of Sustainable agriculture in Lebanon and the best practices to be further enhanced and focused upon among many broad topics such as forestry, organic agriculture, food security, cost effective land use, water efficiency, etc.
 - Jessica Obeid. She is an expert on Lebanon's Energy sector. We conversed on the renewable energy and energy efficiency programs in Lebanon and further discussed the Development of Lebanon Long-Term Strategy (LTS).
 - Mahmoud Araissi. He is an expert on Lebanon's Finance sector. We discussed attracting



and increasing investment potential in green projects that Lebanon can benefit from by adopting a 100% green vision for the country and aligning financial structures with this vision.

- Maya Karkour. She is an expert on Lebanon's Circular Economy / Consumption and Production sectors. We discussed the role of circular economy in shifting Lebanon's production and products to higher sustainability standards, with less toxicity and recyclable potentials.
- Aoun Abi Aoun. He is an expert on Lebanon's Tourism sector. We discussed the enormous potential of eco-tourism in Lebanon, and how to support a coherent strategy and favor this type of tourism considering that Tourism is the most promising sector for the country.
- Rami Semaan. He is an expert on Lebanon's Transport sector. We outlined short term & long term goals towards an integrated and efficient land transportation system in Lebanon.

In addition to the National Team, many partnerships were formed, and included a large network of decision-makers, political leaders, and civil society in Lebanon and abroad.

- Aroha - CVF: They are mandated to develop CPP (climate prosperity plan) for Lebanon. They have agreed to integrate their work into the LEDS, and they will conduct modeling for some of the issues.
- Other Collaborations - World bank is developing a climate change plan for its own program in Lebanon. We also agreed will provide our the outcomes for them to integrate within their plan.
- Lebanon Climate Act (LCA) is a platform that brings all non-state climate leaders together to assist in achieving the country's climate change ambition. Members of the LCA join the climate fight, and commit to bold climate action in that sense.
- Lebanon Eco Movement (LEM) is a network of over 60 environmental organization and associations, working together to face Lebanon's environmental challenges, preserving its natural and cultural heritage, and achieving a healthy and sustainable environment, through raising awareness and advocating local communities to work on preserving their natural resources as well as adhering to all ratified international conventions and governmental agreements.



4. Organization of work

The work in 2022 had the following structure:

- Agreeing with LbD team on a workplan for 2022
- Contracting of sectoral experts, and agreeing with each one of them on a workplan to deliver sectoral storylines
- Conducting deeper research and producing five sectoral storylines (Circular Economy, Transport, Agriculture, Finance, Energy Sectors)
- Collecting input from the experts for the online national public consultation questionnaire
- Producing a preliminary draft of Lebanon's Climate Prosperity Plan Result framework, showing the objectives and targets of the modelling done by Aroha-CVF
- Organizing two scrums for two sectors (Circular Economy & Transport sectors) and presenting the sectoral storylines for input and validation
- Establishing new partnerships and strengthening old ones, for the implementation of the work, as well as ensuring solid buy-in of the produced vision by relevant stakeholders (both political and technical levels)
- Networking with a wide group of stakeholders from different backgrounds (both public and private sectors) to ensure that validity of the approach in relation to local community needs and aspirations
- Continuous coordination and follow-up with the Ministry of Environment climate change team and other partners to ensure validation, alignment and synchronization in implementing the work
- Continuous analyzing of existing government strategies and plans with respect to a green economy vision in line with the 1.5C trajectory and a good life for all Lebanese



5. Detailed 2022 Activities

Formal Scrums

- ❖ **One-on-one Meetings for selecting Sectoral Experts to lead on 6 sectors** (Agriculture, Energy, Transport, Finance, Circular Economy and Tourism)

Following the long “headhunting” process for selecting experienced experts on the 6 vital and productive sectors which have substantial socioeconomic benefits for the country, a series of introductory one-on-one meetings with potential candidates were held to discuss the TOR and further define the purpose and methodology of the project, to make sure the project’s main vision is aligned with theirs. These meetings were followed with email and phone call conversations that consequently lead to the on-boarding of the selected experts.

- 13 January 2022 (Zoom Meeting) – IndyACT and Ali Chalak (Finance Sector)
- 13 January 2022 (Zoom Meeting) – IndyACT and Pascal Abdallah (Tourism Sector)
- 15 January 2022 (Zoom Meeting) – IndyACT and Wafaa Dikah Hamze (Agriculture Sector)
- 17 January 2022 (Zoom Meeting) – IndyACT and Maya Karkour (Circular Economy Sector)
- 17 January 2022 (Zoom Meeting) – IndyACT and Jessica Obeid (Energy Sector)
- 21 January 2022 (Zoom Meeting) – IndyACT and Jean Stephan (Agriculture Sector)
- 28 January 2022 (Zoom Meeting) – IndyACT and Rami Semaan (Finance Sector)
- 14 February 2022 (Zoom Meeting) – IndyACT and Walid Marrouch (Finance Sector)
- Signing of contracts with all the experts
- 09 March 2022 (Zoom Meeting) – National Team, LbD core team, 6 Selected Experts;
Project’s call to on-board the selected sectoral experts and launch the storyline development building on the draft vision

- ❖ **Sectoral Storylines** (Preparatory Meetings before the Distributed Scrums)

Right after our kickoff meeting (9 March 2022) to launch 100% Lebanon Project and on-board the selected sectoral experts; the project team (Energeia, IndyACT, and Ministry of Environment), started a series of meetings and discussions to come up with 6 Sectoral Storyline narratives, and consequently produce along with the Sectoral Experts, 6 narrative drafts that will be debated later on in separate Distributed Scrums for each sector.

In our meetings we discussed and described the progression from the future vision document



back to the present, and the milestones in getting there, using 2030 and 2050 as hard markers. These markers would enable modelling as well as the non-numerical elements of each sectoral storyline describing the narrative of the social and economic transformation of the sector.

The preliminary narrative drafts produced by experts were reviewed by project team (Energieia, IndyACT, and Ministry of Environment), and input was communicated to each expert through emails, and one-on-one calls. The input provided to the experts led to further discussions on sequencing steps between the sectors.

➤ Meeting with Experts

- 16 March 2022 (Zoom Meeting) – IndyACT and Agriculture Lead Expert (Jean Stephan) ; **Sectoral Storyline Discussion**
- 18 March 2022 (Zoom Meeting) – IndyACT and Circular Economy Lead Expert (Maya Karkour) ; **Sectoral Storyline Discussion**
- 21 March 2022 (Zoom Meeting) – IndyACT and Energy Lead Expert (Jessica Obeid) ; **Sectoral Storyline Discussion**
- 21 March 2022 (Zoom Meeting) – IndyACT and Finance Expert (Walid Marrouch) ; **Sectoral Storyline Discussion**
- 22 March 2022 (Zoom Meeting) – IndyACT and Transport Lead Expert (Rami Semaan) ; **Sectoral Storyline Discussion**
- 22 March 2022 (Zoom Meeting) – IndyACT and Tourist Expert (Pascal Abdallah) ; **Sectoral Storyline Discussion**
- 26 March 2022 (Zoom Meeting) – IndyACT and Finance Lead Expert (Mahmoud Araysi) ; **Sectoral Storyline Discussion**
- 1 June 2022 (Zoom Meeting) – National Team (IndyACT, MoE); **Discussing the preliminary narrative draft on Transport Sector**
- 7 June 2022 (Zoom Meeting) – National Team (IndyACT, MoE) and Transport Lead Expert (Rami Semaan) ; **Discussing (with the expert) the preliminary narrative draft on Transport Sector**
- 7 September 2022 (Zoom Meeting) – National Team (IndyACT, MoE) ; **Discussing the reviewed narrative draft on Transport Sector**
- 21 November 2022 (Zoom Meeting) – IndyACT and Tourism Lead Expert (Aoun Abi Aoun) ; **Sectoral Storyline Discussion**
- 29 November 2022 (Zoom Meeting) – National Team (IndyACT) and Circular Economy Lead Expert (Maya Karkour) ; **Discussing the reviewed narrative draft on Circular Economy Sector**



- 6 December 2022 (Zoom Meeting) – National Team (IndyACT, MoE) ; **Distributed Scrums preparation call**
- 13 December 2022 (Zoom Meeting) – National Team (IndyACT, MoE) and Transport Lead Expert (Rami Semaan) ; **Distributed Scrum (Transport) preparatory call**
- 13 December 2022 (Zoom Meeting) – National Team (IndyACT) and Circular Economy Lead Expert (Maya Karkour) ; **Distributed Scrum (Circular Economy) preparatory call**

➤ Meeting with Core team

- 21 January 2022 (Zoom Meeting), **Discussing project logistics and ideas for the upcoming scrums structure** (Jose, Gilberto, IndyACT)
- 28 February 2022 (Zoom Meeting), **Preparatory meeting for the project's Kickoff Meeting** (Gilberto, Francisco, IndyACT)
- 15 March 2022 (Zoom Meeting), **2nd Meeting Core Teams** (all participating countries)
- 6 April 2022 (Zoom Meeting), **Setting deliverables timeframe** (LbD core team – IndyACT)
- 1 June 2022 (Zoom Meeting) , **Lebanon Schmatic for way forward, sectoral storylines development** (LbD core team – IndyACT)
- 8 June 2022 (Zoom Meeting), **Reviewing Lebanon Schmatic for way forward, sectoral storylines development** (LbD core team – IndyACT)
- 4 October 2022 (Zoom Meeting), **Discussing the narrative draft on Transport Sector and general progress in the whole project** (LbD core team – IndyACT)
- 2 December 2022 (Zoom Meeting), **Preparatory Meeting for the Cross-Project Meeting** (LbD core team – IndyACT)
- 8 December 2022 (Zoom Meeting), **Cross-Project Meeting** (all participating countries)

❖ Distributed Scrums 1

Upon the completion of the preliminary narrative drafts of two Sectoral Storylines (Circular Economy & Transport Sector); The leading experts on each of the two sectors, along with the National Team organized Distributed Scrums to test the storylines with sectoral stakeholders, refine them during the scrum interaction, and then generate feedback.

At the beginning of the scrums, the Lebanon national team presented the stakeholders with an



overall view of the project aims and methodology, including the concept of future refinement inherent in the methodology of the project, while describing the progression from the future vision document back to the present, and the milestones in getting there, using main hard markers 2030 and 2050.

Following that, Sectoral storylines were opened up for discussion to the participants in 2 focus group meetings (Distributed Scrums) to revise the storyline for the Circular Economy & Transport sectors, identifying approach, targets, and keystone projects to be included in the Lebanese LEDS.

The two scrums held were very rich and diverse as to the participants' disciplines, gender, and age. The participating stakeholders were both from public and private sectors, including think tanks, academia, entrepreneurs, business founders, decision makers, NGOs, etc. relevant to the corresponding Sectors (Circular Economy and Transport Sectors).

The discussions were very successful and intense, reflecting the ideas, understandings, concerns and aspirations of the participants that were eagerly sharing their insights and willing to get involved in future discussions and workshops.

➤ **Distributed Scrum 1.1 : Circular Economy Sector** (15 December 2022)

- **Number of Participants:** 21 (including the National Team and the Sectoral lead Expert Maya Karkour)
- **Gender Distribution:** 12 F / 8 M / 1 Others
- **Youth Participation:** 12 (under 35 years)
- **List of Participants** (Multidisciplinary Stakeholders of great experience and knowledge of the Circular Economy Sector):
 - * Dr. Nada Sabra (Environmental Expert, UNIDO)
 - * Luca Todeschini (Industrial Development Expert, UNIDO)
 - * Cynthia Kreidy (Consultant)
 - * Joslin Kehdy (Regenerate hub, Founder of Recycle Lebanon)
 - * Christelle Bou Harb (University Student, ESDU-AUB)
 - * Emilio Hajj (University Student, ESDU-AUB)
 - * Batoul Hakim (Entrepreneur, Savvy Element)
 - * Dr. Gaby Kassab (ECOSERV NGO - Electronic Waste Management)
 - * Pierre Baaklini (CEO, Lebanon Waste Management – Recycling Facility)
 - * Marc Aoun (Co-Founder, Compost Baladi – Agricultural Services)
 - * Marwan Rizkallah (Solid Waste Expert, MAN Entreprise)



➤ **Distributed Scrum 1.2 : Transport Sector** (16 December 2022)

- **Number of Participants:** 21 (including the National Team and the Sectoral lead Expert Rami Semaan)
- **Gender Distribution:** 8 F / 12 M / 1 Others
- **Youth Participation:** 10 (under 35 years)
- **List of Participants** (Multidisciplinary Stakeholders of great experience and knowledge of the Transport Sector):
 - * Ali Masri (Ministry of Public Work and Transport)
 - * Leya Zgheib (UNDP)
 - * Nabil Mneimne (UNDP)
 - * Nabil Nehmeh (American University of Beirut, AUB - Academia)
 - * Mira Morad (World Bank)
 - * Gaelle Samaha (World Bank)
 - * Charbel Afif (University of Saint Joseph, USJ – Academia)
 - * Mousbah Rajab (Lebanese University, LU - Academia)
 - * Mark Haddad (Lebanese American University, LAU - Academia)
 - * Ramy Mahmoud (The Youth Association for Social Awareness on Road Safety, YASA - NGO)
 - * Petra Geagea (Lebanese Association for School Safety Awareness, LASSA - NGO)
 - * Jan Willem de Coo (Wave Bike – Business)
 - * Chadi Faraj, (Advocacy- Riders’ Rights)
 - * Fadi Al Sayegh (Advocacy-Riders’ Rights)

➤ **Societal Demand for Better Environment**

- **7 April 2022** (Zoom Meeting) ; first thematic spin-off group meeting on Societal Demand for Better Environment (Jose Garibaldi, José Luis Samaniego, Omar Ramírez Tejada, Dana Halwani, and Vidal Romero)
- Following the Spin-off group meeting, Team Lebanon submitted a drafted document with main points such as the “Theories that would help us understand how to create and sustain societal demand for a better environment”, including brief examples on such theories as visualization, influence, persistence, professionalism, and relevance.



Other engagement or outreach meetings

During the reporting period, the National Team developed the project in three lines of work: technical development, capacity building, and strengthening of coalitions and networks.

- **Cluster4Green Open Day and Workshop, organized by Berytech** (7 December 2022): A panel discussion on Circularity, followed by a workshop on the best strategies to integrate Circularity in a business model, and designing a roadmap of activities to be done on Circular Economy in Lebanon during 2023. IndyACT presented the work done on circular economy in the LbD project.
- **Aroha – CVF (Climate Vulnerable Forum)** : Throughout the year 2022, several meetings were held among the National Team and Aroha-CVF, who are mandated to develop CPP (climate prosperity plan) for Lebanon. Aroha-CVF have agreed to integrate their work into the LEDSD, and they will conduct modelling for some of the issues related to the Economic, Social, Energy, Environment, Investments & Findings, and SDG's assessment. In addition to meetings, all parties were continuously in touch via emails, sharing ideas and always seeking new potentials and dimensions.
 - * **24 February 2022** (Zoom Meeting) ; Integration of Aroha-CVF CPP inputs into Lebanon's Official LEDSD, within the 100% Lebanon Vision – LbD Project

IndyACT met with Aroha-CVF, to exchange an introductory brief on the nature of work and projects implemented by each of the two entities, discussing potential synergies, where IndyACT presented the 100% Lebanon Vision main objectives for promoting a green recovery, where Aroha, discussed how through the CPP contribution, would substantiate the vision articulated with data, scenarios, and project proposals.
 - * **15 June 2022** (Zoom Meeting) ; Lebanon CPP Discussions

Coordination Call between the National Team (IndyACT, Green Mind, MoE) and Aroha-CVF team to coordinate input among the different parties' contributions towards the LEDSD/CPP of Lebanon. In the meeting, all parties also agreed on sharing Road Maps for the work to be conducted in the future, especially in terms of Modeling.
 - * **06 September 2022** (Zoom Meeting) ; Aroha's Visit Schedule Discussion

Coordination Call between the National Team and Aroha-CVF, to discuss the potential visit of Aroha-CVF's team to Lebanon, and discuss the schedule and types of potential



meetings to be held with key stakeholders to go over the CPP, the preliminary results, and assess priorities related to their field of expertise

* **20 September 2022** (Zoom Meeting) ; Lebanon Preliminary Modelling Results

Coordination Call between the National Team and Aroha-CVF, to discuss the preliminary modelling results shared earlier by Aroha-CVF, and to discuss the assumptions and inputs that were or will be used for the modeling

* **16 November 2022** (MoE team met with Aroha at the COP27 in Sharm el Sheikh); based on the meeting, Aroha-CVF prepared a proposed results framework for the Lebanon CPP, which will serve to calibrate the modelling. The National Team also shared some national sources on electricity prices and other needed material that would further enhance the modelling results.

- **World Bank** (February 2022): The World Bank **has initiated discussions on the Green Economy in Lebanon, and is** developing a climate change plan for its own program in Lebanon. IndyACT presented 100% Lebanon Vision to them in a roundtable, where they were very interested in engaging in the process as well. The National Team agreed to provide their outcomes for them to integrate within their plan.

World Bank has initiated discussions on the Green Economy in Lebanon. We presented the work we are doing to them in a roundtable, and they are interested to engage in the process as well, with the potential to finance parts of the plan in the future. So we are already looking for opportunities to finance the plan. We had a call with IUCN and the Ministry of Environment last week to initiate a process to develop a proposal to GCF SAP to submit through IUCN, based on the outcomes of the plan.

- **Online Platform** (February 2022): **Generating dialogue among the Lebanese public;** in addition to feedback from seminars, workshops, roundtables, and social media platforms; we aimed at creating a 2 way communication, interactive online survey to be disseminated, with questions addressed to measure where people are in relation to sustainable development and green economy. The input collected will thus, inform the various discussions being conducted with civil society, private sector, government institutions and think tanks, to produce new knowledge on how the Green Economy concept could be applied in Lebanon.

* 21 January 2022 (Zoom Meeting) ; Gilberto, Francisco, IndyACT, ImagineLabs- Media Communication (Charles Hajj)



- * 28 February 2022 (Gilberto, Francisco, IndyACT) – Zoom Meeting
- * 06 April 2022 (Gilberto, Jose, IndyACT) – Zoom Meeting ; survey platform coordination

6. Knowledge insights and Findings from project 2022

The main points used by the team to reflect on and base our learnings on, are linked to two key points, the scrums held, and the preliminary modelling generation.

6.1 Scrums:

During the first two scrums, we managed to test-ground and get a general input from a wide array of stakeholders on their knowledge and expectations regarding Lebanon's Green Recovery.

The scrums were divided into 2 main parts. In the first part, the national team presented the overall objectives of the project, and the lead experts presented their preliminary papers as a prelude to initiate the dialogue and debate amongst the focus groups. In the second part, the participants debated about 4 main questions regarding the first part.

- 1- **Ambitions 2030 - 2050 Targets**
- 2- **Obstacles (to Target achieving)**
- 3- **Overcoming Obstacles**
- 4- **Concrete Projects/Proposals**

➤ **Scrum 1: Circular Economy Sector**

- **Part 1 - Objectives:** A sector with a dual objective of fighting climate change and achieving prosperity for all citizens. Contributing to a good quality of life, through reducing emissions from the material flow in society, reducing pollution, creating jobs, and economic growth, especially through maximizing decentralized community-based composting & recycling, and extended producer responsibility (EPR)



- **Part 2 - Questions:**

- * **Question 1, Ambitions 2030-2050 Targets:**

This section was very debatable, participants had many concerns, mostly doubtful, but yet keen about achieving the most ambitious targets. Additionally, participants argued about the process, and how to achieve it. Main concerns are as follow:

- » Targets may look good in form but not in practice
- » Targets should be discussed after analyzing the process (especially as to waste management)
- » Add “Level of Toxicity” as targets, not only GHG; showing people quantitative analysis rather than only qualitative analysis
- » Reconsider the impact of target alternatives and tradeoffs

- * **Question 2, Obstacles (to target achieving):**

The participants’ main concern was mainly related to the policy of decision makers, and mentality of the Lebanese community regarding sustainability. Main obstacles are as follow:

- » Full adoption of strategy by Cabinet
- » Getting buy-in is crucial
- » Enforcing policies
- » Emphasis on Fossil Fuel and the potential gas isn’t “economy safe”, however, energy cost, especially as to reliable renewable energy, is very costly.
- » Most of the local municipalities are corrupt
- » Government online platforms/forms are too complicated to be utilized, and sometimes not clear (lack transparency). And at the same time, industries aren’t properly communicating their queries and concerns with them so that the process is improved

- * **Question 3, Overcoming Obstacles:**

The participants’ main concern was mainly related to the policy of decision makers, and mentality of the Lebanese community regarding sustainability. Main obstacles as to overcoming obstacles (in both the waste management and industry) are as follows:

- » Incentivizing businesses and entrepreneurs initiatives, and engaging citizens through directly linking producers to consumers
- » Increasing social/behavioral responsibility
- » Valorizing the waste stream into food & beverages sector (different possibilities and alternatives were discussed in that regard, example taxations, price reductions, shift in consumption/production, etc.)



- » Decentralization and Municipality empowerment (through legislation, capacity building and increased funding)
- » Policy dialogue, coordination and alignment between all relevant decision makers
- » Filling the data gap, through mapping (waste streams and industry) to further understand needs and potentials (use of new technologies is also helpful)
- » Law enforcement and increasing awareness amongst the citizens
- » Reconsidering the production of certain industries in Lebanon, where probably importing would be more efficient both economically and environmentally

* **Question 4, Concrete Projects/Proposals:**

The participants emphasized on building upon existing experiences and initiatives. And so, learning by doing and leading by example. Where one project would lead to another and so on so forth, success would most probably be contagious. The participants also talked about their own initiatives/businesses, exchanged ideas and shared thoughts to further develop new outcomes. Some promising examples include:

- » Lebanon Waste Management (LWM) sorting facility
- » Regenerate hub for mapping & digitalizing the data onto an online platform (identifying material flows)
- » SwitchMed ; where industries can save money due to resource efficiency (especially as to local resources and logistics reducing production costs)

➤ **Srum 2: Transport Sector**

- **Part 1 - Objectives:** An effective Transport Demand Management (TDM) strategy aiming at reducing the length, frequency & time of land trips conducted by individuals; and also reducing the use of the private passenger car, by introducing and strengthening diverse, alternative modes of transport (biking, walking, motorcycles, mass public transport, etc.), as well as substitution of fossil fuel with other technologies (eV, hydrogen, sustainable biofuels).



- **Part 2 - Questions:**

- * **Question 1, Ambitions 2030-2050 Targets:**

Participants agreed upon having a holistic, transversal, and integrated vision linking all relevant sectors together, especially regarding the social, economic and environmental impact of the transport sector.

Nevertheless, in relation to the enormous global development and efforts to shift from combustion engine to electric vehicles EV, Lebanon has no option but adapt. Change is coming sooner or later, and no one (even modelling projections) can predict the speed of transition/shifting of such change. Thus, Lebanese people should make use of this challenging situation as a positive opportunity to inspire and force change.

- » Widening the scope of the targets from 100% EV to 100% carbon emission-free output by 2050, since the main pillars of a good transportation infrastructure are accessibility, (environmental) sustainability, and efficiency.
- » Include electric freight in the targets and study as well
- » Include the shift to hybrid vehicles as well, rather than solely EV, which might be more feasible in Lebanon. Especially that the vision's targets are based on examples from other countries and not mathematical models specifically for Lebanon
- » There's no added value to setting numbers in a target if there's no mathematical modeling done and an action plan (tailor-made for Lebanon) linked to it
- » There are dynamic/updated needs to be taken into consideration regarding the targets (example, 50% of Lebanese population currently live beneath the poverty line). *We're 8 years away from 2030 targets and numbers so far don't seem realistic, so we need a recent benchmark to abide by (compared to countries that have similar cases as ours (similarity as to circumstances, conditions and time)*
- » *Focus more on how to incentivize the acceleration of transition from combustion engines to EV, and guide it specifically by governmental push through legislations and incentives*
- » From an urban planning perspective; replacing gasoline-powered cars with electric vehicles in an effort to reduce polluting emissions does little to improve public space, since they have the same volumes and impacts on it. Nevertheless, that doesn't necessarily contribute to the "good life" of dwellers who still lack the right to the city (public spaces healthy and fully accessible to pedestrians and other means of soft transport)



* **Question 2, Obstacles (to target achieving):**

The main debate was governed by the ineffective public institutions and the lack of funding to develop public transport infrastructure. A gap in data and statistics is also a major challenge, but it is the result of the two challenges stated before. Also, the tradeoffs of transition from the current situation regarding mainly the combustion engines into clean mobility & technology were an important part of the debate. Such major shift necessitates the readiness of the Lebanese community, market and institutions at multi-scales (legislation, infrastructure, social acceptance (culture change), technological advancement, social and market potential and adaptation, etc.).

The major obstacles/challenges were as follows:

- » There is a lack of services stations for EV and new technology vehicles (which require a complex system from services to guarantees)
- » Fear/risk from technological dump where the excessive stock in the production countries (US & Europe) will be shipped to Lebanon, making it more difficult for Lebanon to reach the zero carbon goal by 2050. *Here comes the role of the government in pushing further and blocking shipping based on criteria and legislations.*
- » There is an abundance of transport studies, policies, concepts, and designs in Lebanon (over the past 25 years by various authorities) already, but the problem is the lack of effective implementation
- » There's no data/or data is outdated (especially on transport demand, who, when, where and why) and consequently, there's a lot of guess work
- » The calamity is mainly at the decision-making level; *Actors in control of the transport system are opposed to sustainable transport and create obstacles to block it to increase citizens' dependency on the conventional political environment*
- » Lack of awareness at the decision making level; *Political leaders and concerned actors are convinced that it's enough to buy good busses in order to have a public transport system*
- » Some decision makers or experts are convinced that the realization of vital projects and the application of laws will force citizens to adapt to the new situation in the long term, but this might not be true
- » The main reason for the disastrous situation is the unbalanced modal split and the absence of a sustainable PT system; Lebanon lacks any mass transit or any kind of reliable PT facilities, (despite high population density and the short distances)
- » Taxis and buses are the primary modes of public transportation in Lebanon; yet they operate with insufficient regulations



- » Obtaining funds for transportation infrastructure investments is a challenge
- » Low quality of services on both levels, pedestrians and vehicles; bad roads conditions, lack of fixed bus stops (both as to timing and location), road safety measures (lighting, sidewalks, bridges, maintenance, etc.), security aspect and the increase of street crime can hinder public transport use and non-motorized modes.
- » Lack of data and survey to compute, and thus figure out the gaps to cover the needs

* **Question 3, Overcoming Obstacles:**

Despite all the consecutive and progressive crisis, the participants agreed on the fact that opportunities rise with needs that will sooner or later force change. Also, the fact that Lebanese are creative by nature, encourages them to create solutions and adapt. Suggestions were mostly based on the necessity for reforms (political, institutional, technical, etc.) and a reconstruction of civic values and the implementation of certain basic actions before the realization of any vital long-term project.

Above all, the top priority should always include raising awareness, since mostly people are not aware of solutions in the first place rather than they don't want to apply/abide by them. Suggestions were as follows:

- » Enable the different stakeholders (from the private sector) to contribute to these targets, for example, by providing guidance and specific incentives, and maybe even applying penalties.
- » Have an immediate action plan that can be done without a lot of investments and that could even be done beyond the mandate of the Ministry of Public Works & Transport (or any other ministry/institutional level), relying on different stakeholders
- » Transportation projects should be coordinated at all levels of government (municipalities and relevant ministries) guided by a holistic approach, integrating different sectors such as urban planning, and energy sector (especially as to the supply of electricity for EV)
- » Ensure a just and valorized integration of the informal/illegal -existing- transportation systems (red plate license, mini vans, tuk tuk, delivery motors, etc.) into the formal transportation system; *mainly through initiating dialogue with these stakeholders to understand their livelihoods, needs and demands to adjust and suggest solutions that are beneficial where no one is left behind*
- » *Ensure a smooth transition from one situation to another and balance losses and*



LEARNING by **DOING**

- gains, as there will always be losers and winners*
- » *Institutional reforms which require a relatively broad political consensus*
 - » Law enforcement; Reforms should be implemented, supervised and monitored
 - » Creating funding agencies coordination group, and effective public-private partnerships (PPP) working on a Long-term financing mechanism
 - » To add value to the targets, we need up-to-date new and reliable data as statistics, surveys, etc. *(not only having abundance of studies tackling same old revised components) and consequently, funds should be channeled to solve the problems revealed by this data*
 - » *Ensure commitment from ministry side to publish old data and then lead on recollecting updated versions, and deciding on the actions that will follow (planning, investing, execution, etc.)*
 - » Traffic congestion reduction (mainly through urban planning and law enforcement, example)
 - » Cycling/walking safety (through law enforcement, urban planning, and social awareness)
 - » Road and rail networks maintenance
 - » Create an integrated PT service, where social inclusion and networking is key
 - » Increasing the demand on public transportation (making it very inconvenient for citizens to use their private cars) and thus, forcing cultural and behavioural change regarding public transportation
 - » Enforce shopping centers to have charging stations for EV (law enforcement)
 - » Strengthening alternative modes of transportation (non-motorized modes, mass public transportation, car-pooling, motorcycles, bikes, walking, etc.)
 - » Encourage small businesses that usually own most of the “know-how” in their fields
 - » Enhance strategies (at both levels, public & private sectors) to fill in the gaps & lack of service production (for example academic institutions can create program for electric car, services and trainings)
 - » Incentivizing businesses with environmental policies (remote working, adopt a hierarchy in transportation for work related purposes, minimize international travel, etc.)
 - » Increase the market share of efficient technologies and enhance their use at multi-levels such as planning, execution, data gathering (to be used by commuters, service providers and supervisors)
 - » Prepare the public space for public use, not only as to integrating the public transportation but also enhancing soft mobility (walking, cycling)



* **Question 4, Concrete Projects/Proposals:**

Participants debated the projects and proposals that already existed in current plans, and prioritized them based on the storyline criteria. Some of the key new projects not mentioned in the storyline are:

- » Offer citizens a digital payment card with which they can only pay in buses that are part of the “National bus plan”. This will make citizens choose those buses over others and indirectly incentivize the bus operators to join this system.
- » Aim to create a car-free street / no-car zone (urban planning aligned to legislations and transport strategy) to set an example (Existing examples include Hamra street or Gemayzeh street. *Only pedestrians, specific buses (or a tram), and cyclists should be allowed to enter. Shop-owners and residents can enter say between 6am and 10am with a car or truck to restock etc.*
- » *Decentralized electric parks in potential villages*
- » Rehabilitating the rail transport network is feasible now that there is a political decision to do so.
- » Start from micro to macro examples, like for example having pilot projects locally (even if at small scales) and replicating them later on a wider and more general level (examples, projects in cities replicated later in districts etc.)

6.2 Modelling:

In addition to the scrums held, we received a preliminary draft document from Aroha-CVF on Lebanon Climate Prosperity Plan Result framework, showing the objectives and targets of the modelling. The preliminary modelling projections gave us further insights and modelling guidelines regarding the three different scenarios (business as usual **BAU**, Nationally Determined Contribution **NDC**, and Climate Prosperity Plan **CPP** in line with the 100% Lebanon vision). Nevertheless, the elaboration and refinement of the draft will be further discussed in 2023.

7. Reflections

The two “Distributed Scrums” done in 2022 were very interesting and promising, and the impact the project had on all levels was positive, although the overall situation in Lebanon is worrying, instable and generally negative. The participants were very enthusiastic about the initiative, and stressed on the importance of such discussions between multidisciplinary stakeholders from



both private and public sectors. The participants also showed their interest and willingness in getting involved in future discussions, workshops and actions.

During these two scrums (the Circular Economy and Transport sectors), the focus groups participants shared their concerns, suggestions and feedback on the presentations and papers shared among them. They also identified approach, targets, and keystone projects to be included in the LEDS. The participants were also encouraged to send us their textual review and suggestions, where we got 3 documents. Nevertheless, different input and notes from the two scrums will be compiled and sent to the experts for review which will help them refine their papers consequently.

To sum up our future plans as a schematic for way forward, we list the main points below:

1. Distributed Scrum 1

In the first quarter of 2023, we will finish the first set of “Distributed Scrums” to cover the four remaining sectors, Agriculture, Energy, Finance, and Tourism sector.

Following this phase (Distributed Scrums), the experts from each sector will receive feedback, refinement and revision to the sectoral storylines towards the vision, including confirmation of the metric and non-metric components of each sectoral storyline.

Lebanon national team, in consultation with the Experts, should provide a report of their experience in their sectoral discussions, as well as particular feedback, observations, insights, and cross-sectoral proposals. These are discussed between the Lebanon National Team and LbD Core team.

2. Expert Scrum 1

Reporting back from distributed sectoral meetings. Sequencing and results discussed. Refinement of storylines.

This Scrum among experts receives back the reports from each sector and cross-checks for coherence among sectoral visions. The basis for quantitative analysis is confirmed for each sectoral storyline and the proposed sequencing.

Refinement of the whole progression is done with inputs from the Experts at the scrum.

Energieia and others participate, alongside national team and the Lebanese experts.



This generates an internal report back about the scrum, to be done by the national team.

2.1 Modelling generation

Using the refined storylines and the markers discussed, quantitative aspects of the vision document are collated and further developed as necessary.

This is done by Lebanese resources and by Energeia team.

Straw-man proposals for projects are developed for each sector, including, where possible, markers for the modelling approaches.

This is then presented to the Scrum Experts, who are to prepare distributed scrums bringing this modelling insight back to their respective sectors.

3. Sectoral Workshop

Model results and observations are presented to the sectoral participants; observations and feedback taken.

Refinement of the sectoral storylines and their sequences, resulting in improved narratives of sustainable development for each sector, supported by model's trajectories.

Discussion of possible project proposals within the sectors.

Experts prepare report of results and of possible project proposals within their sectors.

4. Expert Scrum 2

Reporting back with refined sectoral storylines and narratives within model's trajectories.

Review across experts for coherence.

Review of proposed project proposals.

Prioritisation of project proposals, and listing of conditions required for proposals—looking to weigh ambition vs. readiness to advance.



Energieia and others participate, alongside national team and the Lebanese experts.

This generates an internal report back about the scrum, to be done by the national team.

4.1 Stakeholders feedback

Confirmation of narratives and sectoral storylines, through an open call with a wide range of stakeholders (getting buy-in).

Original stakeholders in expert scrums will have an opportunity to comment on the confirmation of narratives and sequenced storylines, as well as projected project proposals.

Refinement and selection of project proposals from sectors, with consideration of sequencing and viability.

5. Reporting

Results of final distributed scrums reported back to LbD, along with refined project proposals within the context of the refined sectoral storylines and modelling framework.