



In collaboration with



# Strategic Plan for Development Of

The Industrial Zones (2018-2030)



September 2018

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#### Introduction

Lebanon is blessed with the entrepreneurial capabilities of its people and the skills of its labors. The industrial sector had been able to keep pace with the economic growth that the country has experienced before the civil war, which was an achievement "in itself, taking into account the accelerated pace of economic growth in that period.

The industrial sector is currently facing many problems caused by the chaos and the massive destruction of infrastructure that the war left behind and from the spill-over of the Syrian conflict in Lebanon which led to an aggravated economic, social, health, educational even security crisis. The huge numbers of displaced Syrians have put pressure on the Lebanese infrastructure that already suffers from serious deficiencies in the basic infrastructural services (electricity, water, sanitation, transport, solid waste, schools, rent, hospitals...), it also led to an increase in unemployment affecting 36 % of Lebanese youth. The impact of the civil war in Syria was reflected in a significant decline in the Lebanese industrial and agricultural sectors.

The closure of borders restricting trade with Syria and neighboring countries caused a drastic decline in agricultural and industrial exports to neighboring countries particularly Arab countries. As a result, agricultural exports fell by 11.4% in 2015 compared to 2014. Also, the Lebanese industrial exports dropped by 33 % between 2010 and 2017 (MOI - 2017).

To promote the integrated production, specialization, industrial exports, expand the domestic market for the Lebanese sustainable products and implement the SDGs of 2030 Agenda, MOI started working on an integrated project based on rehabilitation of the actual Industrial Zones and establishing new sustainable IZs that will be aligned with the specific objectives of the MOI's Vision (Lebanon Industry 2025) and its strategic plan (2016-2020).

## I- Analysis of Current industrial situation:

#### **<u>1-On the industrial sector level</u>**

It was estimated that there were around 134,000 workers employed in manufacturing sector in 2016 based on the Ministry of Industry (Data -2017). A detailed statistical study conducted by MoI in 2017 sampling 1975 factories (noting that The number of permitted factories by the Ministry reached about 5,212 factories till 10/12/2018, in addition to about 2000 factories from the previously permitted by the governorates or unpermitted factories and are in the process of being legalized by the ministry) it showed that the industrial output of this sample was equal to \$6.6 billion in 2015. It means that according to our estimate of the general industrial output which can be estimated at about \$13.2 billion represents about 25% of Lebanon's formal GDP which is about \$53 billion. In the same study, industrial exports reached USD 2.956 billion in 2015, which represents 22.4% of industrial output (MOI-2017).

#### A- Various obstacles of the industrial sector:

- Successive governments have not considered the industrial sector as a priority.
- The political instability, lack of security and the deterioration of the regional situation led to closing the borders and to a decrease of exports and investments in the industrial sector
- High costs of energy production, high wages of workers, high prices of real estate properties, and high cost of the usage of water and fighting pollution.
- The pressure caused by refugees (1.5 million of Syrians people + 0.5 million of Palestinians) on the Lebanese infrastructure (pollution/waste water and energy, etc....).
- Random distribution of the factories in all the Lebanese regions since 1975.
- Dilapidated infrastructure (Water, Electricity, Telecommunications, Railways....).

#### **B-** Major characteristics of the industrial sector:

- Over 75% of industries employ less than 19 workers.
- Only 3% of Industries employ over 100 workers.
- The manufacturing value added (MVA) by size of enterprise of registered/formal enterprises, firms with less than 19 workers generate about 20% of gross MVA while those employing more than 100 workers generate about 50% of gross MVA.
- The industrial sector is also **geographically concentrated**. Over than 55% of registered manufacturing enterprises are located in Beirut and Mount Lebanon regions with a lot of industrial locations being interfered with residential, commercial and agricultural areas.

#### **<u>2- On the Ministry of Industry level:</u>**

In 2015, after a deep mobilization, modernization, activation, and consolidations of departments, the Ministry of industry launched its integrated vision "Lebanon Industry 2025" for the industrial sector which included 11 strategic objectives have to be achieved by 2025, and seven operational objectives allocated with multiple tools for its implementation and each tool allocated with different activities. The vision was accompanied by an Executive strategic plan (2016-2020) and an operational plan for the years 2016-2017 and 2018. The Ministry of Industry has started implementing its executive strategic plan and its operational plans since 2016. The present strategic (Strategic Development Plan for the Industrial Zones 2018 -2030) is one of the efforts to implement the strategic Objectives of the integrated Vision of the Ministry (Lebanon industry 2025).

MOI has mainstreamed the relevant SDGs (1, 3,7,9,11,12 and 17) into its Integrated Vision (Lebanon Industry 2025), Executive Strategy for 2016–2020 and Operational Plans for 2017 and 2018. The operational objectives are: 1- Expanding the domestic market by increasing local production and reducing imports; 2-Increasing the internal and external competitiveness of the national industry; 3-increasing industrial exports; 4-Increasing investment and financing in the industrial sector; 5- Encouraging green industries; 6- Encouraging knowledge-based industries and 7- Media for the Industry.

#### **\*** <u>The Ministry of Industry:</u>

- Distinguished by its good relationships built with citizens at one side, and with public and private associations, international and regional and non-governmental organizations at the other side.
- Conducts Economic studies, researches and markets intelligence studies on the Macro and Micro level for the interest of the development of the Industrial sector in particular and Lebanon's Economy as a whole.
- Characterizes **its staff** of high scientific qualifications, diverse majors and experiences gained.
- Adopts the one-stop shop in order to serve citizens, save time and to facilitate administrative procedures for industrial permits and all its services. MOI follows an open-door policy, and adopts transparency and the role of guidance in licensing and in the field of inspections on factories from both technical and operational aspects.
- Conducts periodic field inspections to increase the legalization of the industrial associations and to ensure that they comply with Lebanese and international safety standards.
- Characterized by the commitment of its different units to effective participation in decision making and it publishes monthly statistics and information concerning the Lebanese industry, in addition to its promotional activities of industry on its website: (www.industry.gov.lb). MOI publishes data on its financial budget, expenditures, procurements and industrial reports (exports, permits....) for the sake of promoting transparency, governance, guidance, spreading awareness, promoting the cause of the industrial sector, guiding it towards the best and ameliorating the Lebanese industrial product.
- Inadequacy of the financial budget given by the government (represents 0.04 % of the total public budget) to perform its tasks and to carry out its assignment in the best way possible.

- Initiated the construction of a new central building for the Ministry headquarters and for its related associations, and new centers for its regional departments to be capable of presenting the best services and to host all the staff.
- Works on updating its own legal texts and amending the deficiencies in the laws that support the industry.
- Strives to benefit from the technical support offered by international, regional and non-governmental organizations and corporations (EU UNIDO UNDP IECD and donating agencies). As well as reinforcing the collaboration with the Association of the Lebanese industrialists, Chambers of Commerce, Industry and Agriculture and all the concerned stakeholders to follow up on the problems of the industrialists.
- Sponsor for a number of graduates from the Lebanese universities by giving them the chance to receive training in the ministry's units and some of the factories.
- Works on signing agreements, memorandums and protocols to reinforce industry and scientific research that contribute in the development of the industrial sector and is the head of the Lebanese Industrial Research Achievements program (LIRA).
- Collaborates as well with the Industrial Research Institute (IRI), to follow up the releasing of the certificates
  of conformity and adopting their overall laboratories tests. The Ministry is aiming at activating the role of
  the Lebanese Council for Accreditation (COLIBAC), the Industrial Research Institute (IRI) and Lebanese
  Institution for Norms and Standards (Libnor), with the objective of enhancing the infrastructures of the
  Lebanese product.
- Directs the Lebanese youth towards the vocational education, and relating it to the labor market and the needs of the industrial sector for the scientific and training qualifications, as well as developing it.
- Formulates development projects, decrees and legislations for the sake of the Industrial promotion.

• Invites industrialists as well as its staff, to participate in training courses, conferences and workshops, with the objective of developing their work and exchanging best effective practices.

## **II- Analysis of Current situation of IZs**

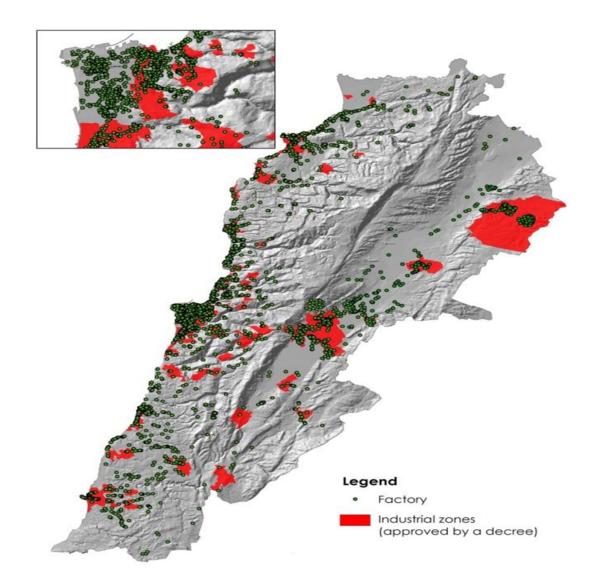
#### **Challenges and problems:**

Industrial zones are scattered all over Lebanese territories because there wasn't any previous national plan to create, organize and develop IZs in Lebanon. The establishment of these zones was based on commercial rules and on a partial concept represented by the desire of each town/ or region to create its own IZs. These zones are completely built on private properties, which are classified as IZs, without any new suitable infrastructure. The Mandatory of Classification IZs was transferred to the MOI since 1997 by the law 642 but activated recently in 2010.

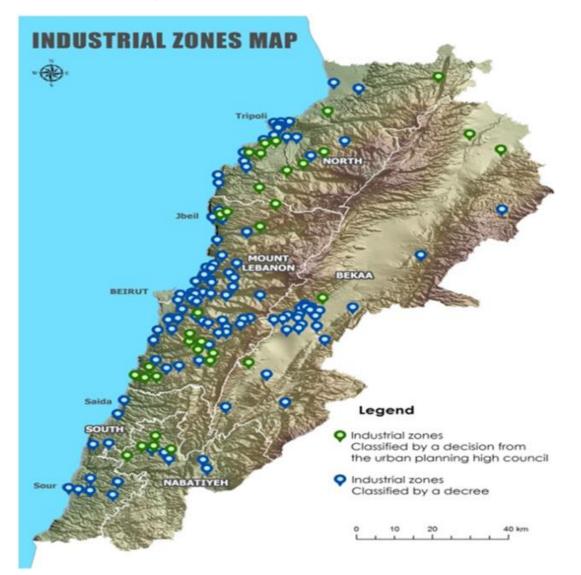
- Lebanon has more than 133 officially recognized private IZs (MOI-2017). Mount Lebanon Governorate (Classified Industrial Zones no = 61), Bekaa Governorate (Classified Industrial Zones no= 22), North and Akkar Governorates (Classified Industrial Zones no = 31), South & Nabatieh Governorates (Classified Industrial Zones no=19).
- IZs have grown spontaneously by custom or concentration of industrial activity and scattered over various parts of the country.
- IZs may have been separated from residential areas at the time of demarcation/land allocation, but the growth of population and urban settlements have now mixed up industrial activity with residential areas. Scattering of industry prevents clustering, the deepening of value chains and taking advantage of the benefits of the economies of scale.
- ➤ The random distribution of appropriate industrial locations prevents the resolution of the two major difficulties faced by the Lebanese industrial sector (the cost and the inefficiency of energy supply and the high cost of land).

- Deterioration of the quality life for some neighbourhoods due to the combination of industrial activity with residential facilities, It makes it difficult for ministry and government to monitor and implement environmental protection measures.
- Most of IZs are located on coastal lands, and mostly in Mount Lebanon that creates basic problems for the industrial Zones development: high cost of lands, Labor, Energy, Scarcity of land leasing operations, lack of services and appropriate infrastructure and many of factories are located outside existing IZ because till the year 2005, 80% of Lebanon was non classified lands (MOI-2017).

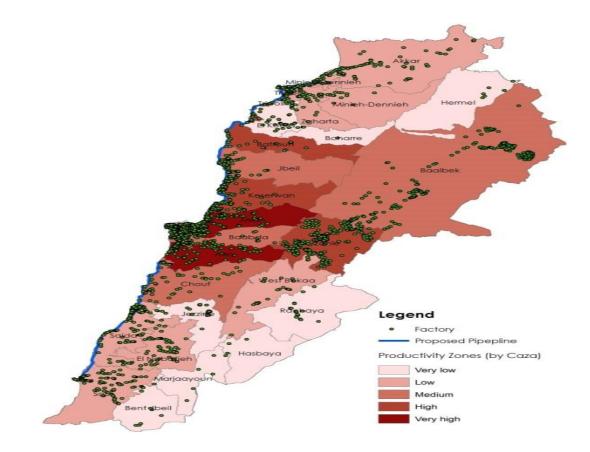
**Figure 1** (Source of the map MOI - 2017) shows the random distribution of factories and IZs in Lebanon. Beirut, the Capital, does not include any classified IZs. There are number of factories permitted previously and proliferated through residential areas due to the accumulated chronic economic and social situation problems.



**Figure 2** (Source of the map MOI - 2017) shows the present distribution of IZs within Lebanon. As previously observed, industrial and business activity are concentrated in the coastal west of Lebanon, particularly in the greater Beirut and Mount of Lebanon regions.



**Figure 3 (Source of the map MOI - 2017)** shows the distribution of the Industrial zones and factories per region: Number of permitted factories (by the ministry) per region: Mount of Lebanon: 3121, Beirut: 218, Nabatieh 270, South of Lebanon: 323, Akkar: 76, North of Lebanon 377, Baalbak-el Hermel: 233, Bekaa: 593, Total: 5212 till 25/9/2018.



## **III-MOI Strategic Plan for the Lebanese IZs:**

**1-The Vision:** *"Industrial Zones that contribute effectively and consistently to the implementation of the sustainable development Goals of 2030 Agenda".* 

2- The Mission : "Establishing, organizing and conducting the advanced Lebanese Industrial Zones and contributing to its sustainability, activation, protection and development".

3-The powers of the MOI: derive from the laws and regulations ruling the industrial sector, in particular law no. 642 of 2/6/1997 (Establishment of the MOI).

The functions of MOI by law 642/97 were stated in the second article as per the following:

- \* Organize, coordinate, protect and develop national industries.
- \* Permit industrial enterprises, inspect and control their compliance with standards and specifications.
- **Suggest the creation of Industrial Cities and Zones by specific classifications.**
- \* Conduct economic studies, researches, and industrial statistics and promote industrial products in domestic and foreign markets.

## **IV- Strategic Operational Goal of IZs Strategic Plan:**

The Ministry of Industry continuously evolves from being only a regulator to becoming a strategic conductor supervisor and partner to the private sector and all stakeholders in Lebanon's future industrial development. The ministry will lead the development of Industrial Zones in Lebanon by pursuing a national strategy for the development of IZs.

#### **The Operational Five Goals Are:**

1- Establishing new sustainable organized industrial zones in all the Lebanese regions and organizing the ongoing industrial Zones

2-Establishing database about existing and prospect industrial zones to enable conducting analyses, researches and studies on relevant issues and trends

3- Mobilizing and coordinating partners and stakeholders (from the domestic and foreign private sectors, various organs of the central and local governments, domestic and international funding agencies etc.) with the objective of attracting financing and developing of the zones

4-Developing the quality of the infrastructure and business services offered by IZs to client enterprises

5- Improving the capacity of the Industrial Zones Bureau at the MOI to guide, Monitor and implement the strategy.

## V- MOI's Integrated Project for IZs development to face challenges and solve problems:

The ministry of industry planned and developed its project in collaboration of UNIDO (facilitator and supporter) aiming at organizing of existing IZs and establishing new sustainable ones within a sustainable national development framework:

## New Sustainable Industrial Zones Project:

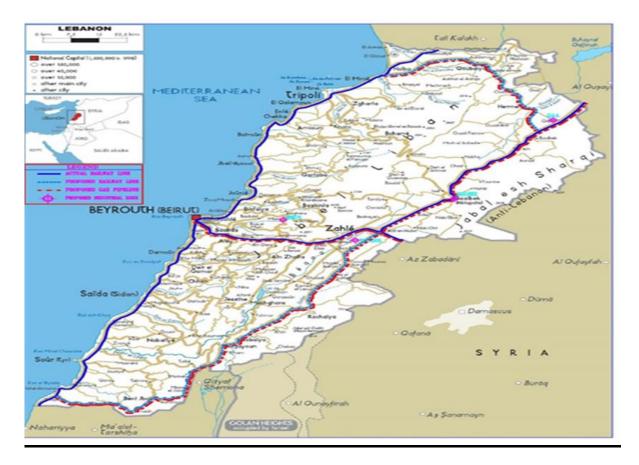
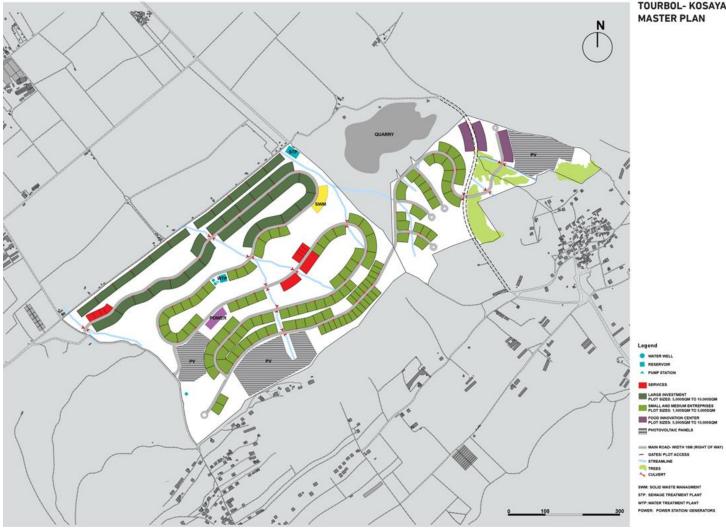
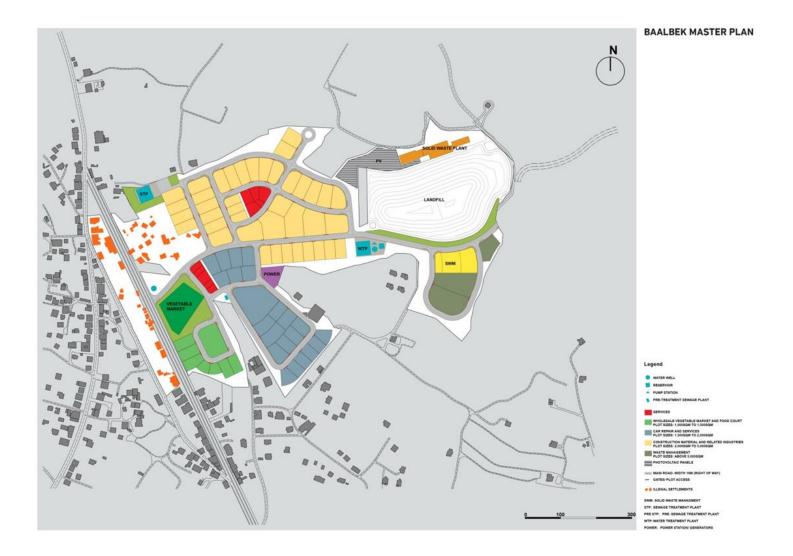


Figure 4 (source of the map: MOI-2017)

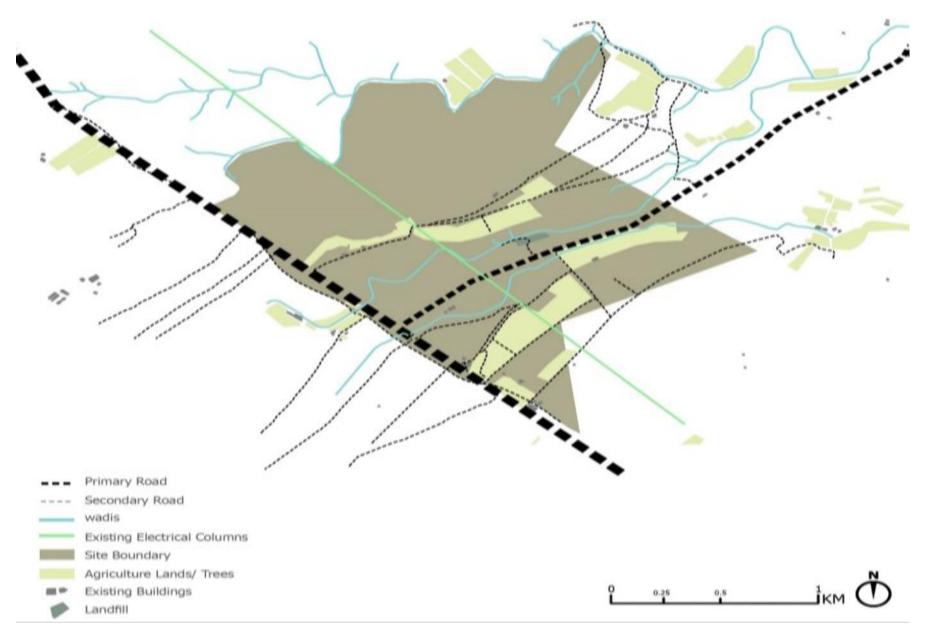


TOURBOL- KOSAYA

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Al- Kaa Master Plan



#### **<u>1- Overview of the project:</u>**

**Based on 6 main pillars:** 

## **1.1- Existing IZs:**

- □ <u>Infrastructure</u> rehabilitation and building (*legal framework, roads, electricity, telephone, waste treatment, parking, green areas and buffers, firefighting system, sewage, irrigation, medical center....*)
- <u>Areas</u>: Bourj Hammoud, Dekwaneh, Boushrieh (Near Nahr el-Mott), Boushrieh (Mar Maroun), Boushrieh (El-Barad El-Younani), Wata Amarat Shalhoub, Zalka, Biakout, Bsalim, Jdeideh, Mkaless, Sin El-Fil, El-Hadath, Baabda, Kfarchima, Choueifat, Bchamoun ... to complete the contour line around the city of Beirut in the first phase.

**1.2- New Industrial Zones:** 

□ Constructing new and sustainable IZs, mainly in collaboration with UNIDO (Supporter and facilitator) in <u>all Lebanese regions</u>, along the <u>contour line in the North, East and South</u> of the country (figure 4 - red line) and the IZs will be connected to each other by the railways.

□ IZs project will benefit from:

- <u>Existing Railways</u> in Lebanon.
- <u>New railways to be constructed</u> along the whole line of the contour line to connect industries to coastal areas.
- <u>Gas pipelines</u> which will be nourished by Oil and Gas wells discovered in the Lebanese territorial waters.
- <u>Connectivity with the seaports along the Lebanese coast.</u>
- The contour line will connect Lebanese IZs to:
  - > Syrian coast and Turkey from the North towards Europe

- > Syria and Iraq from the Northeast towards Central Asia
- > Syria, Jordan and Gulf countries and beyond (Silk Road)
- 1.3- Dry Port in Riyak- Bekaa:
- □ An inland terminal connecting the IZs with a seaport that can be used by industrialists to specialize in production and integration and to export their industrial products.
- Dry Port Connections: with Syria, Iraq, Gulf Countries, Turkey, Europe and central Asia.
- □ <u>Dry Port Services</u>: trans-shipment, consolidation, depot, maintenance of containers and customs clearance.
- **Benefits of Dry Ports:** 
  - > Shifting from road to railways
  - Reduced congestion at seaport gates and their surroundings
  - Coping with capacity constraints at seaport
  - Reduce environmental pollutants emissions and preserving the roads, thereby reducing the cost of roads maintenance and related services
  - Development of rural areas
  - > Improved supply chain logistics
  - Reduced transportation and time cost
  - Serve as a depot (full and empty containers storage)
  - **1.4-** Natural gas power plants:
- □ Possibilities of establishing Natural Gas Power plants in the Industrial Zones to generate electricity by burning natural gas to meet the needs of the Industrial Zones and the surrounding regions.

**1.5 - Artificial Tunnel:** 

□ Constructing Fully Equipped Artificial Tunnel on Beirut-Bekaa road (from Bhamdoun till Chtoura) that keeps Bekaa road open all year long and costs less Time and money than Hammana Tunnel which has been talked about for years.

1.6-Clusters of Technology, Knowledge Economy, Creativity, Services and Innovation:

- □ Constructing technological and innovative industrial clusters in each coastal region (from Nakoura in the South till Abdeh in the North) to provide:
- Provide reduced rental and telecommunications costs (Internet-landline and cellphones...) and comprehensive services center in various technological areas.
- **\*** Enhance ease of business creation.
- Secure jobs opportunities for students with scientific competencies (high salaries-material and moral incentives).
- \* Encourage rapid innovation through research centers, laboratories, and patents with intellectual property rights.
- Increase productivity through specialized inputs and facilitate access to information, synergies, and public goods,
- \* Benefit from economies of scales within the clusters and attract foreign investments.
- \* Enable SMEs located in clusters near competitors and related industries to achieve faster growth, recognition, and improved positioning within the market.
- \* Create supply chain networks within tightly-linked clusters.
- ✤ Promote industrial branding for the high added value, and specialized production, particularly defined by the Integrated Vision of the Lebanese Industrial Sector ("Lebanon Industry 2025") in its sixth operational goal " Encourage New knowledge industry" : telecommunications, programming, nanotechnology, mechatronics, electronics, fashion design, differentiated leather industry, assembly and manufacturing industry, traditional national food industry, medicine, alternative energy, jewelry, industrial equipment, cosmetics, medical herbs and essential oils, perfume, biochemistry, industrial

chemistry, petrochemical industry, petroleum support, maritime, services, ecotourism and industrial tourism.

**<u>2- Implementation Stages of the Project</u>** 

**Completed phases:** 

- ✤ <u>Preliminary studies</u>: for the first phase of the project to establish three industrial zones along the eastern contour line (figure 4).
- Locations: municipal properties of:
  - Turbol- Qusaya, Bekaa
  - ➢ Baalbek, Bekaa
  - ➢ Al-Kaa, Bekaa
- Financing: on-going financing for design and implementation (including rehabilitation of the existing industrial zones)
- **\*** The Potential donors for the three locations include: EIB, EBRD and Italian Cooperation.
- **\*** Feasibility studies total development costs:
- ✤ For Tourbul and Baalbek Zones: of around \$80 million.
- ✤ Al-Kaa Zone is being established by a feasibility study and currently is under way and financed by Italy.

So far the IZs have attracted:

• Financial commitments of 7 million Euros from the Government of Italy, plus One million Euro as a grant for the preliminary studies

- 52 million Euros from the European Investment Bank (plus Euro 4 million for the engineering plans as a grant).
- The EBRD is considering a loan of USD 46 million.

All the amounts are to be invested in the development of the infrastructure of these zones.

#### 3 - Socio-Economic and Environmental Benefits of the IZs Project

The first phase of the IZs project (the 3 locations) will:

The first phase of the IZs project (the 3 locations) will:

- > Host hundreds of new industries and relocated companies
- Include various sectors: Agro-food businesses/ Car repair and services/ Construction/ Creative industries and potential incubators/ Create around 30,000 new direct and indirect job opportunities (out of around 100,000 new jobs of the whole project).
- > Decrease the cost of land for industrial uses as well as transport, labor and production costs
- Improve the quality of infrastructural services (energy, transport, water supply, communication...)
- > Enhance security for tangible businesses assets (buildings, machinery, and physical inventory).
- > Improve municipal planning, (separate industrial and residential spaces).
- Implement the SDGs of 2030 agenda by enhancing environmental, social and economic sustainability.

- > Rural areas development and increase quality of life for residents.
- > Deepen the value chains through the concentration of industrial activities.
- Develop business clusters
- Establish business incubators
- Increase innovation by linking business clusters to R&D/Innovation Centers and Establishing technology centers;
- > Improve and facilitate procedures for Investment Permitting and operating permits and Establish platforms to attract FDI.
- Increase export competitiveness of Lebanese products through an improved export infrastructure.

## **VI- MOI's Steps to implement the Strategy:**

- \* Reassessment for the existing IZ in terms of Classifications, Infrastructure, expansion.
- Implementing new IZs on municipal lands, with only possibility for rent, with a practical and actor legal frame where MOI can control directly these zones.
- Developing of renewable energy (Solar farms...) and Gas pipeline, in the new IZs especially with our future natural gas and benefiting of the existing railway line by completing the line to the contour of Lebanon connected to coastal area and ports. In addition, completing the trace of the existing public road will minimize the cost of expropriation if needed to the minimum, for both railway and gas pipeline.
- Working with the Higher Council for Urban Planning (HCUP) to designate areas for Industrial Zone development based on best practice in urban and environmental planning.
- \* Restore the imbalances between small scale, low value-added industries and large-scale enterprises that dominate the industrial landscape.
- \* Diversify the sub sectorial distribution of industrial investment in order to widen Lebanon's industrial base.
- Improve the competitiveness and cost efficiency of Lebanese industry to make it more competitive in domestic and export markets and encourage value added -based sectors of industry
- ✤ Facilitate investment approvals in Industrial Zones and create a more secure business environment by encouraging long term investments in productive activity.

- Diversify the geographical locations of industries to reduce real estate costs faced by enterprises and rationalize land use between residential, commercial/industrial, agricultural and public spaces.
- Develop rules, regulations and approaches for the creation of Public Private Partnerships for investment, development and management of the IZs;
- Recommend measures for decentralization of IZs operation and management; and support continuous investment promotion efforts for attracting client enterprises in the zones.
- The Government will support the provision of infrastructural services dedicated to the needs of industries targeted as tenants for specific zones.
- MOI will act as a focal point for gathering lessons learned and developing guidelines for infrastructure development in IZs. The four pilot projects in Tourbul, Baalbek, Mtein and al- Kaa, are important examples that will be used for this aspect to implement the IZs strategy.
- The provision of energy supply will be a critical aspect of the infrastructural development of zones. The al Qaa zone, for example, is being planned in conjunction with a solar energy farm. The Ministry will closely monitor the economics of such alternative sources of energy and advocate/circulate successful examples in other IZs.
- The infrastructure for environmental protection will also be an important feature of the infrastructural investments of IZs. Zones development guidelines developed by MOI will ensure the inclusion of environmental protection measures, such as waste water treatment, solid waste collection/disposal and air pollution mitigation measures.
- The Ministry will help zone promoters and stakeholders to develop technical and business plans for zone development that will conform to the needs of target client investors in an environmentally and socially responsible manner.

The concentration of sectorial specialized or linked enterprises would enable zone management and industrial development assistance partners to provide business support services to improve the deepening of value chains, clustering and the improvement of productivity and business efficiency of enterprises.

#### Conclusion

The Ministry of Industry is committed to implement the IZs Development Strategy in line with its Overall Integrated Vision (Lebanon Industry 2025) this strategy integrates with the construction of another specialized industrial zones in other specified and convenient locations for specialized manufacturing to create jobs opportunities and ensure the development where is needed. The construction of industrial zone in Mtein/ Mount of Lebanon with area of 570,000 m2 falls within this framework. The communication with the Netherlands's Government has come a long way to finance the infrastructure in this location, whereas the Netherlands committed to finance a large part of the required amount to build the infrastructures which cost around USD 20 million.

Efforts and communication with the countries and donors continue in a sustainable way. In parallel the communications continues with interested municipalities where the MOI's staff is working on identifying the convenient areas within the MOI's vision and its strategic task for the future.

MOI will mobilize national stakeholders and international partners in the effort to implement the IZs Development Strategy that contribute effectively and consistently to the implementation of the sustainable development Goals of 2030 Agenda.