



Environmental Assessment of Industrial and Energetic Parks, Porto Romano, Durrës, Albania

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Development Of Industrial Zones
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Rapid Environmental Assessment (REA), Proposed Industrial and Energetic Parks, Porto Romano, Durrës, Albania

Government Objective:

Growth of the Albanian economy by establishing attractive conditions for Foreign and Local Direct Investments in Energy and Industry



Purpose Of REA 1

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To protect the environment from potential pollution of future investments to protect human health and biodiversity in villages surrounding the E&I Parks by:

- ▶ assessing current environment status of the site
- ▶ proposing relationship with surroundings
- ▶ minimising negative environmental impacts resulting from the development of the E&I parks
- ▶ identifying environmental improvements that could result from development of the parks

Intended to be complementary to GTZ Study



Current Situation In Durres Region

Population 200,000,(approx)

- Durres city, adjacent Keneta and other urban settlements approx. 170,000)
- Rural areas surrounding Energy and Industrial parks approx. 30,000)

Unemployment 30,000





Recent Growth Of Durrës

RE: Sustainable and Integrated Development of the Tirana-Durrës Region (SIDTDR).

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The Future of Durrës

Re: Sustainable and Integrated Development of the Tirana-Durrës Region (SIDTDR).

- Population of **300,000** projected by 2027
- Needs 50,000 jobs by 2027
- Part of a proposed international “**HUB**”
- Massive **tourism** potential
- Industry and Energy **Parks**
- **Learning Centre**
- **Sustainable** urban and rural areas

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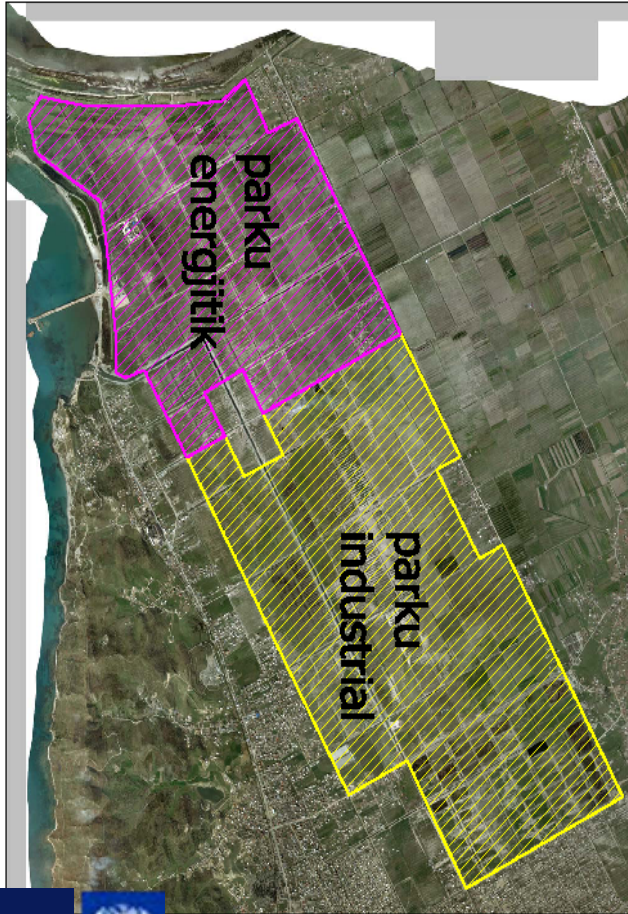


Why E&I Parks Near Durrës?

1. Tirana-Durrës, the region of the capital and main port of Albania, was identified as Europe's fastest growing region in population terms and one of its fastest growing in economic terms
2. Durrës is national economic driver with international potential
3. Suitable empty land near main port
4. Land largely in government ownership
5. Need for investment, jobs and entrepreneurship

The Proposals

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- 1720 hectares:
 - Energetic Park 870ha
 - Industrial Park 850 ha
- Areas for open space and nature
- Area for waste water treatment plant
- Areas for non-industrial employment like universities, offices and out of town retail



The Environment Today

Environmental and Human Health:

- Soil and groundwater
- Air
- Surface water
- Biodiversity
- Human health

Soil And Groundwater

- Old sea bottom
- 20-50m upper layer of clay with low permeability, partly more sandy areas in the uppermost layer
- Groundwater of poor quality, with high content of salts and partly polluted from former activities
- Tectonic risks at 7+ on the Richter scale



Air

Present situation influenced by:

- Unregulated traffic
- Wild burning at municipal waste deposit
- Emissions from open waste water channels
- Emissions from oil/gas activities in the Energetic Park



Surface Water

Present situation influenced by:

- Many drainage channels
- Significant amounts of un-treated waste water from Durrës and local settlements
- Leakage from the waste deposits
- Wash-outs from the soil in connection with flooding

Biodiversity

Present situation influenced by:

- Drained marsh land
- Agricultural activities
- Air pollution
- Polluted waste water
- Waste deposits



Human Health

Present situation influenced by:

- Air pollution and traffic
- Polluted waste water
- Waste deposits, including former industrial activities



Future Situation - Legal Framework

- Law 8934/2002 on environmental protection is basic law
- Law 8990/2003 on environmental impact assessment (EIA)
- Law No. 9108 17/07/2003 Chemical Substances
- Decision of Council of Ministers No 805/2003 on List of activities that have impacts on the environment for which environment permits are required
- Ministerial Decree on the list of local environmental permits and the mandate to REA's to approve these permits
- Regulation No. 1 of 08/17/2004, On participation of the public in the EIA process



Improvements Proposed 1

- Designate area as 'Prestigious Employment Zone; (PEZ) not Industrial and Energetic Parks' and market as such
- Development carefully phased and each phase surrounded by landscaped buffer with open space and nature reserves
- Zone be designed to sustainability principles and promote energy efficiency
- Strict enforcement of earthquake risk reduction in new buildings

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Improvements Proposed 2

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- Waste water treatment plant
- Plans to improve waste management
- Remediation of former industrial plant
- Plans for regulation of traffic, including road construction works
- Plans for urban developments
- Emission and discharge reduction measures for:
 - Establishment of zone
 - Energy related uses
 - Manufacturing
 - Traffic



Improvements Proposed 3

- Controlled emissions to the air - by environmental permits
- Controlled discharges to water bodies - by environmental permits
- Landscaping, including elevation of ground level with uncontaminated soils
- Improved drainage and pumping capacity
- Environmental monitoring system
- Amenities for cities and local people developed e.g. shops, hotels, university, hospital

Proposed Environmental Monitoring System (EMS)

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- ▶ DCM No. 103 31/03/2002 Environment Monitoring in the Republic of Albania
- ▶ System built on the norms of EU with regular monitoring of air, soil, surface water and biodiversity
- ▶ Stations set-up with both impacted and reference areas
- ▶ The three main settlements as well as surrounding areas will be covered



Air Monitoring 1

- 5 stations: Spitalle, Vrinas, Rinia, Main road to the areas, background station at the Bishti i Palles
- To be performed by accredited institutions
- Data to be released to both authorities and public
- Frequency of measurements: 4 time a year
- Running costs: around €5000 a year



Air Monitoring 2

Parameters:

- ▶ PM10/PM2.5 - Particulate matter less than 10 resp. 2.5 μm
- ▶ O₃ - Ozone
- ▶ NO_x - Nitrogen oxides
- ▶ SO₂ - Sulphur dioxide
- ▶ CO - Carbon monoxide
- ▶ H₂S - Hydrogen Sulphide
- ▶ Aliphatic Hydro-carbons
- ▶ Benzene
- ▶ Polycyclic Aromatic Hydrocarbons (PAHs - EPA list)
- ▶ Polychlorinated dibenzo-p,p-dioxins and -dibenzofurans (Dioxin)
- ▶ Elements (As - Arsenic, Cd - Cadmium, Cr - Chromium, Cu - Copper, Hg - Mercury, Ni - Nickel, Pb - Lead, Zn - Zinc)
- ▶ Normalising parameters



To Summarise

- Site highly suitable for employment uses
- Should be a high quality 'Prestigious Employment Zone' and designed to sustainability principles and promote energy efficiency
- Much better road access needed
- Uses should not be restricted to manufacturing
- Amenities for local residents and whole of Durrës with large employment potential to be allowed
- Adjacent settlements protected by buffer zones
- Air, water and soil to be improved
- Earthquake risks to be minimised

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