

“Capacity Building and Strengthening Institutional Arrangement”

Workshop: “Environmental Impact Assessment (EIA)
(for Assessors)”

EIA of an Electric Power Station

Thermal Power Plants Checklist Power Plants

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Check list used by Italy Commission

Review Check List for Electric Power Stations

Plan and Program Frame

Descriptors	Presence of data/arguments	Reference/ Data	Docum. & Refer. Page(s)	Support documentation/tools	Note
<p>a) Plan description in relation to the implementing states of field and territorial planning tools, in which the same plan is placed. b) Description of the planning coherence relationships with the purpose pursued from the planning tools and indication of the eventual modifications taken part with regard to the development hypotheses for the plan.</p>					
<p>National level - Energy sector</p>					
Pro 001	National Energy Plan 1988 e L. 9/91 and L. 10/91				
Pro 002	Energy and Environmental Treaty (November 1998)				
Pro 003	Development Three-Years Plan (GRTN - Manager of National Electric Transmission Network)				
Pro 004	D.Lgs 79/99 related to implementation of the Directive 96/92/CE concerning to common norms for internal energy market				
Pro 005	D. Lgs. 164/00 related to implementation of the Directive 98/30/CE concerning to common norms for natural gas				
<p>National level - Transport sector</p>					
Pro 006	General Transportation Plan (GTP)				

Descriptors	Presence of data/arguments	Reference/ Data	Docum. & Refer. Page(s)	Support documentation/tools	Note
National level - Protection and environmental reclamation sector					
Pro 007	L. 120/02 (Ratification and execution of the Kyoto treaty to Frame Convention of UN on climate change)				
Pro 008	D.Lgs.372/99 related to implementation of the Directive 96/61/CE on IPPC (Integrated Pollution Prevention and Control)				
Pro 009	D.Lgs. 351/99 related to implementation of the Directive 96/62/CE in matter of assessment and management of the environmental air quality.				
Pro 010	National plan for the sustainable development in performance of Agenda 21				
Pro 011	L. 183/89 (National and Interregional Drainage Basin Plan)				
Pro 012	L. 146/95 (Protocol to the Convention on long-range transboundary air pollution - Geneva 18/11/91)				
Pro 013	L. 267/98 (National and Interregional Hydrogeological Risk Plan and prevention measures for hazardous areas)				

	Descriptors	Presence of data/arguments	Reference/ Data	Docum. & Refer. Page(s)	Support documentation/tools	Note
National level - Waste sector						
Pro 014	D.Lgs. 22/97 and subsequent modifications related to implementation of the directives 91/156/CEE on waste, 91/689/CEE on dangerous waste and 94/62/CE on packaging and packaging waste.					
National level - Landscape protection, landscape plan and bounded areas Sector						
Pro 015	L. 394/81 (National Park, National Natural Reserves)					
Pro 016	DPR 448/76 (Wetlands in according to the Convention of Ramsar 2/2/71)					
Pro 017	L. 157/92 (Special Protection Areas in according to the Directive 79/403/CEE "Birds") (DM 3/4/00 list ZPS)					
Pro 018	DPR 357/97 (Community Interesting Site in according to the provisions of the "Habitat" Directive 92/43/CEE) (DM 3/4/00 list Special Areas of Conservation)					
Pro 019	Areas under law constraints of cultural and environmental assets					
Pro 020	Areas under law constraints related to woods and mountain lands).					

Review Check List for Electric Power Stations
Design Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum. & Refer. Page(s)	Support documentation/tools	Note
	Phase of exercise					
	Technical and physical characteristics of the project, interested areas					
Pre 001	Gross Electric Power (at terminals)					
Pre 002	Consumption of the auxiliary supplies					
Pre 003	Thermal power transferred in co-generation					
Pre 004	Net Electric Power					
Pre 005	Thermal Power Inlet					
Pre 006	Net Efficiency					
Pre 007	Index of use					
Pre 008	Thermal unloading in atmosphere					
Pre 009	Thermal unloading in water environment					
Pre 010	interested area					
Pre 011	Occupated area					
Pre 012	Waterproofed surfaces (covered + asphalt)					
Pre 013	Height of the chimney stack					

Review Check List for Electric Power Stations
Design Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum. & Refer. Page(s)	Support documentation/tools	Note
Pre 014	Electrical substation: typology, positioning (inside to the area of plant, external, in armoured, etc.) interested area					
Pre 015	Main fuel					
Pre 016	Number of gas turbines/ boilers					
Pre 017	number of recovery steam boilers					
Pre 018	Number of steam turbines					
Pre 019	Number of auxiliary boilers					
Pre 020	Number of electric generators					
Pre 021	Choice criterions regarding the thermal cycle					
Pre 022	Other used fuels					
Pre 023	Cooling technology for steam condensation					
Pre 024	Number of cooling forms					
Pre 025	Air flowrate at tower outlet					
Pre 026	Outlet temperature of the cooling air					
Pre 027	Cooling techniques for auxiliary supplies					

Review Check List for Electric Power Stations
Design Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum. &Refer. Page(s)	Support documentation/tools	Note
Pre 028	System for reducing and/or abatement air emissions - Description and choice criterions					
Pre 029	System for waste water treatment					
Pre 030	Choice criterions regarding technology for reduction and abatement of pollutants present in waste water.					
Pre 031	Systems for treatment, conditioning, removal, recovery or recycling of solid and liquids waste and by-products					
Pre 032	System for the reduction of vibrations and noises					
Pre 033	Monitoring System					
Pre 034	System of feeding fuels - Description and choice criterions					
Pre 035	Description transport infrastructures and fuels storage (except the gas pipeline)					
Pre 036	Description transport infrastructures and storage of other processes or service materials					
Pre 037	Description civil infrastructures					
Pre 038	Induced traffic					

Review Check List for Electric Power Stations

Design Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum. &Refer. Page(s)	Support documentation/tools	Note
Pre 039	Specific information related to particular processes technologies or to the use of materials used in the specific plant, in relationship to the existing environmental conditions in the site proposed for the installation					
Pre 040	Scheduled length of the exercise phase					

Review Check List for Electric Power Stations
Design Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum. &Refer. Page(s)	Support documentation/tools	Note
Conditionings and restrictions of which it has been due to hold account in the editing of the project						
Pre 041	List of the norms and dispositions, also local ones, related to the safeguard and protection of the environment and population, that are applied to the the productive processes and building technologies with reference particularly to the air quality, to the water protection, to the ionizing radiations, to the use and the transport of inflammable, explosive or toxic substances, to the safety of the plants, to the removal of the waste.					
Pre 042	Norms and prescriptions of urbanistic tools, landscaping and territorial plans and sector plans.					
Pre 043	Current use of the area					
Pre 044	Proximity to plants at major-accident hazards					
Pre 045	Minimal distance from the plant - residential buildings					
Pre 046	Minimal distance from the plant - Areas under hydrogeological law restrictions					

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Design Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum. &Refer. Page(s)	Support documentation/tools	Note
Pre 047	Minimal distance from the plant - Areas under monumental law restrictions					
Pre 048	Minimal distance from the plant - Protected areas or areas under forest law restrictions					
Pre 049	Minimal distance from the plant - Areas under water's courses law restrictions					
Pre 050	Minimal distance from the plant - Coastal area under law restriction					
Pre 051	Minimal distance from the plant - BioItaly sites					
Pre 052	Conditionings induced from the nature and vocation of the places and from particular demands of environmental protection.					

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Design Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum. & Refer. Page(s)	Support documentation/tools	Note
Conditions of use of natural resources and first matters directly and indirectly utilized or interested						
Pre 053	Consumption of superficial water resources					
Pre 054	Consumption of stratum water resources					
Pre 055	Consumption of fuel					
Pre 056	Consumption of chemical compounds					
Pre 057	Consumption of lubricating oils and/or dielectric					
Quantity and characteristics of the waste water, waste, emissions in the atmosphere						
Pre 058	flue-gas flow rate					
Pre 059	Temperature flue-gas flow					
Pre 060	Concentration of SO ₂ in the flue-gas flow					
Pre 061	Concentration of NO _x in the flue-gas flow					
Pre 062	Concentration of CO in the flue-gas flow					
Pre 063	Concentration of particle in the flue-gas flow					
Pre 064	Annual emission SO ₂					
Pre 065	Annual emission NO _x					
Pre 066	Annual emission CO					
Pre 067	Annual emission of particle					
Pre 068	Emission of other pollutants					
Pre 069	Quantity and characteristics of the waste water (direct and indirect)					

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Design Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum. &Refer. Page(s)	Support documentation/tools	Note
Pre 070	Quantity and characteristics of the urban waste and assimilated, special (dangerous and not dangerous)					
Executive level projectual needs and imposed or necessary managerial requirements in following to the environmental analysis						
Pre 071	Executive level projectual needs and imposed or necessary managerial requirements in following to the environmental analysis					
Possible measures not closely connected to the project or provisions of managerial character that are thought opportune to adopt for containing the impacts during the phase of exercise						
Pre 072	Possible measures not closely connected to the project or provisions of managerial character that are thought opportune to adopt for containing the impacts during the phase of exercise					
Interventions for the optimal territory and environment insertion						
Pre 073	Total Volume of the buildings					
Pre 074	Height of the buildings-boilers and turbines					
Pre 075	Height of the cooling towers					

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Design Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum. &Refer. Page(s)	Support documentation/tools	Note
Pre 076	Area assigned to mitigation green works and/or landscaping or naturalistic compensation					
Pre 077	Pre-existent structures (re-use and/or demolition)					
Interventions for equilibrate possible impact on the environment						
Pre 079	Uncontrolled releases of pollutant and harmful substances on the ground and in the subsoil					
Pre 080	Uncontrolled releases of inflammable substances in atmosphere					
Pre 081	Uncontrolled releases of inflammable substances in water body					
Pre 082	Uncontrolled releases of explosive substances in atmosphere					
Pre 083	Explosions, fires, interruptions of activity					
Pre 084	Possibility of accidents during transports of inflammables, explosive or toxic substances					

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Design Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum. & Refer. Page(s)	Support documentation/tools	Note
Pre 085	Assessment in quantitative terms (quantity, leakage rate, reaction time, length, etc.) of the possible esteemed causes of perturbation towards the defined environmental components					
Pre 086	Description of the mitigation and prevention systems (active and passive)					
Pre 087	Possible predispositions for states of emergency					
Pre 088	Residual atmospheric, liquid or solid products					
Pre 089	Possible dismantling (type and predictable length)					
Pre 090	Transformation of the existing plants					
Pre 091	Plan of reclamation and recovery					
Pre 092	Eventual possibilities of re-use of the plant for other finalities					
Pre 093	Plan of recovery to naturalistic purpose					

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Design Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum. & Refer. Page(s)	Support documentation/tools	Note
Construction phase						
Pre 095	Interested areas					
Pre 096	Ground movements					
Pre 097	Water consumption					
Pre 098	Concrete in work					
Pre 099	Quantity and characteristics of the gaseous emission					
Pre 100	Quantity and characteristics of the emission of particle and other pollutants					
Pre 101	Quantity and characteristics of the waste water (direct and indirect)					
Pre 102	Sonorous emission					
Pre 103	Quantity and characteristics of the urban waste and assimilated, special (dangerous and not dangerous)					
Pre 104	Induced traffic					
Pre 105	Middle number of employees					

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Design Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum. &Refer. Page(s)	Support documentation/tools	Note
Pre 106	Possible measures not closely connected to the project or provisions of managerial character that are thought opportune to adopt for containing the impacts during the phase of construction					
Pre 107	Working times (included collateral and auxiliary activities)					
Functionally connected works						
Power line						
Pre 108	Length of power line					
Pre 109	Connection characteristic of power line					
Pre 110	Power line voltage					
Pre 111	Motivation of the project choices					
Pre 112	Geometry and distance of the pylons					
Pre 113	Intersection with transport infrastructures (roads, railroads, navigable way, etc.)					
Pre 114	Landscaping sets and interested monumental, landscaping and naturalistic emergencies					

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Design Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum. &Refer. Page(s)	Support documentation/tools	Note
Pre 115	Distribution of the electric and magnetic fields in function of the distance from the axle of the line					
Gas Pipeline						
Pre 117	Length of gas pipeline					
Pre 118	Diameter and gas pressure					
Pre 119	Connection characteristic of gas pipeline					
Pre 120	Motivation of the projectual choices					
Pre 121	Intersection with transport infrastructures (roads, railroads, navigable way, etc.)					
Pre 122	Distance from "hazard sources"					
Pre 123	Description of the preventive and protective systems (active and/or passive), predispositions for states of emergency					

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Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
ATMOSPHERE						
Present State Characterization						
Aat 001	Wide site definition / site and wide area characterization					
Aat 002	Temperature					
Aat 003	Precipitation- pluviometric regime					
Aat 004	Relative humidity - air humidity Condition					
Aat 005	Wind – anemometric regime					
Aat 006	Solar radiation - terms of radiative and energetic balance					
Aat 007	Atmospheric stability classes					
Aat 008	Mixing height/ inversion layer height					

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Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Aat 009	Frequency fog events					
Aat 010	Wind calms					
Aat 011	Air quality state preventive characterization (gas concentration and particulate material)-mobile sources					
Aat 012	Air quality state preventive characterization (gas concentration and particulate material)-stable sources					
Aat 013	Air quality state preventive characterization (gas concentration and particulate material)-other					

Review Check List for Electric Power Stations						
Environmental Frame						
	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Analysis of the Project-Component Interaction						
Aat 014	Effects forecasts of the pollutants in motion by air quality models (vertical/horizontal transport)					
Aat 015	Description of the used model (mixing height, dispersive scheme, algorithms for calculation of the plume rise orographic of the territory characteristics, weather data used) and input conditions.					
Aat 016	Possible forecasts microclimatic alterations in exercise phase					
Aat 017	Air quality forecasts in construction site phase					

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Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Aat 018	Forecast of the pollutant's physical-chemical transformations effects					
Aat 019	Mathematical models used for the forecast transformations physical-chemical pollutant's effects					
Aat 020	Containment measures for possible impacts					
Aat 021	Monitoring networks (location of measure points and parameters)					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Water Environment						
Present State Characterization						
Aai 001	Wide site definition / site and wide area characterization					
Aai 002	Water body quantitative characterization					
Aai 003	determination of the water flow (river regime, wave phenomena, marine currents, etc)					
Aai 004	Current pollutants valuation with sources localization					
Aai 005	Superficial waters quality ante-operam					
Aai 006	Underground waters quality ante-operam					

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Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Aai 007	Indication of necessary water flow for the DMV (Flow Minimal Value) maintenance					
Aai 008	Current uses of water resource definition, comprised the natural and predicted vocation					
Analysis of the Project-Component Interaction						
Aai 009	Hydraulic regime and currents alteration (significant withdrawal)					
Aai 010	Natural solid transport modification with intervention regarding to the coasts erosion and burring					
Aai 011	Pollutants cargo post operam with sources localization					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Aai 012	Verification of the thermal plume associated to the cooling water immition in the water body					
Aai 013	Monitoring networks (location of measure points and parameters)					

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Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
	Soil and subsoil					
	Present State Characterization					
Ass 001	Wide site definition / site and Wide area characterization					
Ass 002	Geological, geolitical and structural territory characterization					
Ass 003	Definition of seismically area and eventual eruptive phenomena description					
Ass 004	Waters infiltration and circulation in the subsoil					
Ass 005	Underground water stratums presence (general characteristics of each stratum, feeding areas)					
Ass 006	Sources and well localization					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Ass 007	Acquifer vulnerability					
Ass 008	Geomorphological characterization and location of landform change process in action					
Ass 009	Verification of the areas classified as high landslide hazard.					
Ass 010	Verification of the areas classified as high overflow hazard.					
Ass 011	Presence of most interesting site from geologic point of view (geotopos)					
Ass 012	Soils and rocks geotechnical characteristics - slope stability					

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Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Ass 013	Pedological characterization of the interested area (physical-chemical biotic composition, and interactions)					
Ass 014	Land use capacity					
Ass 015	Geochemical characterization of the solid and fluid phases presents in the soil and in the subsoil					
Analysis of the Project-Component Interaction						
Ass 016	Hydraulic regime alteration - water outflows alteration (layer withdrawal)					
Ass 017	Interactions of the foundations with the underground water outflows					
Ass 018	Subtraction of fertile grounds to elevated capacity of use (actual or potential)					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Ass 019	Interaction with areas to overflow hazard					
Ass 020	Interaction with vulnerabilities areas from the geomorphological point of view					
Ass 021	Removal of every kind waste					
Ass 022	Monitoring networks (location of measure points and parameters)					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Vegetation, flora and fauna						
Present state Characterization						
Avf 001	Wide site definition / site and wide area characterization					
Avf 002	Flora research and adopted methodology (land)					
Avf 003	Forest map and pasture land use					
Avf 004	Vegetation map (type, scale, area, legend)					
Avf 005	Real/potential significant vegetation and flora (land)					
Avf 006	Protect floristic Species (land)					
Avf 007	Fauna research and adopted methodology (land)					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Avf 008	Vertebrate fauna map (type, scale, area, legend) (land)					
Avf 009	Real/potential significant macroinvertebrate fauna (land)					
Avf 010	Protected fauna species (land)					
Avf 011	Flora research and adopted methodology (aquatic)					
Avf 012	Real/potential significant vegetation and flora (aquatic)					
Avf 013	Protected flora species (aquatic)					
Avf 014	Fauna research and adopted methodology (aquatic)					
Avf 015	Vertebrate fauna map (type, scale, area, legend) (aquatic)					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Avf 016	Real/potential significant macroinvertebrate fauna (aquatic)					
Avf 017	Protected fauna species (aquatic)					
Analysis of the Project-Component Interaction						
Avf 018	Annoyance to vegetable species of naturalistic-scientific interest					
Avf 019	Annoyance to animal species of naturalistic-scientific interest					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Avf 020	Annoyance to the alieutico patrimony of the zone					
Avf 021	Annoyance to the fauna and animal patrimony of the zone					
Avf 022	Mitigations intervention					
Avf 023	Monitoring networks (location of measure points and parameters)					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Ecosystems						
Present State Characterization						
Aes 001	Wide site definition / site and Wide area characterization					
Aes 002	International importance of biotype according to Ramsar Convention					
Aes 003	Cartographic individualization, legislative and typological of the particular interest site indentified in the territory in examination (protected areas)					
Aes 004	Map of the significant Ecosystemics Units (land)					
Aes 006	Ecosystem research and adopted methodologies (Nature, quality, biological diversity) (land)					

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Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Aes 008	Significant area from trophic level and reproductive point of view (land)					
Aes 005	Map of the significant Ecosystemics Units (aquatic)					
Aes 007	Ecosystem research and adopted methodologies (Nature, quality, biological diversity) (aquatic)					
Aes 009	Significant area from trophic level and reproductive point of view (aquatic)					

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Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
	Analysis of the Project-Component Interaction					
Aes 010	Habitat fragmentation of the ecological continuity in land ecosystems					
Aes 011	Annoyance to the significant ecosystems (land)					
Aes 012	Habitat fragmentation of the ecological continuity in water ecosystems					
Aes 013	Annoyance to the significant ecosystems (aquatic)					
Aes 014	Mitigations intervention					
Aes 015	Monitoring networks (location of measure points and parameters)					

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Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Public Health						
Present State Characterization						
Asp 001	Wide site definition / site and wide area characterization					
Asp 002	Demographic and health characteristics for sex and age					
Analysis of the Project-Component Interaction						
Asp 003	Risk causes					
Asp 004	Ecotoxicologic risk					
Asp 005	Pollutants destination					
Asp 006	Exposed population					
Asp 007	Integrations with other analysis					

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Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Asp 008	Verification in forced norms					
Asp 009	Sensitive groups					
Asp 010	Compound exposure					
Asp 011	Monitoring intervention on the sensitive groups					

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Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
	Noise and vibrations					
	Present State Characterization					
Arv 001	Wide site definition / site and wide area characterization					
Arv 002	Description of the characteristics and speed of the wind					
Arv 003	Definition of the area interested from the work and neighboring zones in according to the Municipal Plan (PRG (General Regulator Plan))					
Arv 004	Definition of the interested area from the project and neighboring areas in according to the acoustic mapping					

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Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Arv 005	Location, description and characterization of the actually present sonorous sources and pertinent to the area					
Arv 006	Individualization and description of the state and the places of the sensitive receptors					
Arv 007	Past analysis related to measures of noise in the interested areas					
Arv 008	Measures campaign near the sensitive receptors					
Analysis of Project-Component interaction						
Arv 009	Normative references					
Arv 010	Prediction Analysis					

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Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Arv 011	Specification of the acoustic powers and the levels of sonorous pressure to 1 mt of distance of the main devices					
Arv 012	Forecast of the acoustic climate					
Arv 013	Forecast of the acoustic climate in the environment in reference with the differential criterion					
Arv 014	Health aspects					
Arv 015	Works of sound isolation, mitigation and containment of the noise					
Arv 016	Definition of the sources of vibrations with suitable survey of acceleration in the three fundamental directions					

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Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Arv 017	Characterization in terms of sectorial analysis and temporal necessity according to the formalities foreseen by the I.S.O (International Standards Organization) 2631 (people annoyance)					
Arv 018	Monitoring networks (location of measure and parameters) in exercise					
Arv 019	Works for noise reduction tied up to the activity of construction site					
Arv 020	Annoyance from vibrations tied up to the activity of construction site					

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Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Arv 021	Prediction analysis of the noise produced from the activity of construction site and from its armature.					
Arv 022	Individualization of the receptors more exposed to the noise in the phase of construction site					
Arv 023	Interventions of noise mitigation in the phase of construction site					
Arv 024	Monitoring networks (location of measure and parameters) in the phase of construction site					

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Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
	Ionizing and Non Ionizing Radiations					
	Present State Characterization					
Ara 001	Wide site definition / site and Wide area characterization					
Ara 002	Location, description and characterization of the sources of emf (electromagnetic fields) currently present in the interested territory (ionizing radiations)					
Ara 003	Location, description and characterization of the sources of emf currently present in the interested territory (non-ionizing radiations)					

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Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Ara 004	Description of the state and the places of the sensitive receptors (ionizing radiations)					
Ara 005	Description of the state and the places of the sensitive receptors (non-ionizing radiations)					
Ara 006	Past analysis related to measures of emf in the interested areas (ionizing radiations)					
Ara 007	Past analysis related to measures of emf in the interested areas (non-ionizing radiations)					
Analysis of Project-Component interaction						
Ara 008	Normative references					

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Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Ara 009	Prediction analysis (ionizing radiations)					
Ara 010	Prediction analysis (non-ionizing radiations)					
Ara 011	Prediction analysis (non-ionizing radiations)					
Ara 012	Health aspects					
Ara 013	Definition of the exposition possibilities					
Ara 014	Monitoring networks (location of measure points and parameters)					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Landscape						
Present State Characterization						
Apa 001	Wide site definition / site and Wide area characterization					
Apa 002	Adopted methodology (unity of landscape, etc.)					
Apa 003	Significant elements of the antropic arrangement and natural landscape					
Analysis of Project-Component interaction						
Apa 004	Visual analysis turned to the individualization and characterization of the static and dynamic points of view connected with the work of project					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Apa 005	Inter-visibility map of the plant and analysis of the visible points					
Apa 006	Landscape changes					
Apa 007	Landscaping and territorial plans					
Apa 008	Urbanistic or territorial law restrictions					
Apa 009	Description of mitigation intervention					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Integrative information						
Aii 001	Monitoring plan					
Aii 002	Systems of intervention in the hypothesis to be revealed particular emergencies					
Aii 002	Measures of compensation					
Aii 003	Measures of restoration of the sites					
Aii 004	Environmental insertion plain					
Aii 005	Availability to adopt voluntary tools of environmental management foreseen by the community normative					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
	Works functionally connected					
	Power line					
Ae1 001	Wide site definition / site and Wide area characterization					
Ae1 002	Tracing description					
Ass 023	Geomorphologic characterization and location of the processes in action					
Ass 024	Verification of the areas classified as subjected to landslide					
Ass 025	Verification of the areas classified as subjected to overflow					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Ass 026	Geo-technical characteristic of the grounds and the rocks - stability of the slopes					
Ass 027	Interactions of the foundations with the subterranean water outflows					
Ass 028	Interaction with areas to overflow hazard					
Ass 029	Interaction with vulnerabilities areas from the geomorphological point of view					
Avf 024	Annoyance to vegetable with naturalistic-scientific interest					
Avf 025	Annoyance to fauna with naturalistic-scientific interest					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Avf 026	Cartographic, legislative and typological location of the most important site in the area in exam					
Aes 016	Annoyance to the meaningful ecosystems					
Asp 012	Critical demographic groups					
Asp 013	Population exposure					
Asp 014	Combined exposure of the population to the ionizing and non-ionizing radiations					
Asp 015	Monitoring interventions on the critical groups of population					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Arv 025	Definition of the interested area by the project and neighboring zones to the senses of the Municipal PRG (GENERAL REGULATOR PLAN) or acoustic mapping.					
Arv 026	Location, description and characterization of the currently sonorous sources					
Arv 027	Individualization and description of the state and the places of the sensitive receptors to the noise					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Arv 028	Prediction analysis of the acoustic climate caused by the crown effect in the surrounding environment					
Arv 029	Troubles from vibrations caused by construction site					
Arv 030	Sound isolation work, mitigation and noise containment either in phase of exercise or in phase of construction site					
Ara 015	Location, description and characterization of the sources of electromagnetic fields present in the considered area.					
Ara 016	Description of the state and the places of the sensitive receptors to the non-ionizing radiations					
Ara 017	Prediction analysis (non-ionizing radiations)					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Ara 018	Magnetic induction: limit of quality 0,2 μ T (micro Tesla)					
Apa 010	Visual analysis turned to the location and characterization of the static and dynamic points of view connected with the work of project					
Apa 011	Inter-visibility map of the plant and analysis of the visible points					
Apa 012	Changes of the landscape					
Apa 013	Urbanistic or territorial law restrictions					
Apa 014	Description of mitigation works (Landscaping insertion plain)					
Ael 003	Monitoring in the phase of construction site					
Ael 004	Interventions of mitigation					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Ael 005	Monitoring Plan					
Ael 006	Measures of compensation					
Ael 007	Measures of restoration of the sites					
Ael 008	Plan of environmental insertion					
Ael 009	Systems of intervention in the hypothesis to be revealed particular emergencies					
Ael 010	Availability to adopt voluntary tools of environmental management foreseen by the community normative					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
	Gas pipeline					
Aga 001	Wide site definition / site and wide area characterization					
Aga 002	Monitoring in construction site phase					
Aga 003	Mitigation Interventions					
Aga 004	Compensation Measures					
Ass 030	Geomorphologic characterization and location of the processes in action					
Ass 031	Verification of the areas classified as subjected to landslide					
Ass 032	Verification of the areas classified as subjected to overflow					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Ass 033	Presence of underground water layer					
Ass 034	Geo-technical characteristic of the grounds and the rocks - stability of the slope					
Ass 035	Pedology characterization of the interested area (physical-chemistry composition, biotic and interactions)					
Ass 036	Capacity of land use					
Ass 037	Interactions of the foundations with the underground water outflows					
Ass 038	Subtraction of fertile grounds to elevated use capacity (actual or potential)					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Ass 039	Interaction with areas to outflows hazard					
Ass 040	Interaction with vulnerabilities areas from the geomorphological point of view					
Avf 027	Annoyance to vegetable with naturalistic-scientific interest					
Avf 028	Annoyance to animal kind of naturalistic-scientific interest					
Avf 029	Annoyance to the fauna and hunting patrimony of the area					
Avf 030	Annoyance to the alieutic patrimony of the area					
Aes 017	Fragmentation of the ecological continuity in terrestrial ecosystems					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Aes 018	Fragmentation of the ecological continuity in aquatic ecosystems					
Aes 019	Annoyance to the significant earth ecosystems					
Aes 020	Annoyance to the significant water ecosystems					
Asp 016	Causes of risk for the population					
Asp 017	Population exposed to accident hazard					
Apa 015	Visual analysis turned to the individualization and characterization of the static and dynamic points of view connected with the work of project					

Review Check List for Electric Power Stations

Environmental Frame

	Descriptors	Presence of data/arguments	Reference/ Data	Docum.& Refer. Page(s)	Support docum./tools	Notes
Apa 016	Inter-visibility map of the plant and analysis of the visible points					
Apa 017	Landscape changes					
Apa 018	Landscaping and territorial plans					
Apa 019	Law restrictions					
Aga 005	Monitoring Plan					
Aga 006	Compensation Measures					
Aga 007	Measures of restoration of the sites					
Aga 008	Environmental insertion plan					
Aga 009	Availability to adopt voluntary tools of environmental management foreseen by the community normative					

	Descriptors	Presence of data/arguments	Reference/ Data	Docum. & Refer. Page(s)	Support documentation/tools	Note
National level - Secure sector						
Pro 021	Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances - so called Seveso II Directive)					
National level - Other programming instruments						
Pro 022	Possible other financing and programming instruments.					
Regional level - Energy sector						
Pro 023	Regional Energy Plan					
Regional level - Transport sector						
Pro 024	Regional Transportation Plan (RTP)					
Regional level - Protection and environmental reclamation sector						
Pro 025	Mining Activities Plan					
Pro 026	Plan on air reclamation and quality safeguard					
Pro 027	L. 183/89 (Regional Drainage Basin Plan)					
Pro 028	L. 267/98 (Regional Hydrogeological Risk Plan and prevention measures for hazardous areas)					
Pro 029	L. 152/99 (Water Protection Plan)					
Pro 030	Specific planning of the interested region					

	Descriptors	Presence of data/arguments	Reference/ Data	Docum. & Refer. Page(s)	Support documentation/tools	Note
Regional level - Waste sector						
Pro 031	Regional Plan for waste management					
Regional level - Landscape protection, landscape plan and bounded areas Sector						
Pro 032	Territorial Landscaping Plan					
Pro 033	L. 394/91 (Regional and Interregional Natural Reserves)					
Pro 034	L. 394/91 (Regional Natural Reserve)					
Pro 035	L. 394/91 (Plan for the Park)					
Pro 036	L. 157/92 (Fauna Plan)					
Pro 037	Specific planning of the interested region					
Regional level - Socio-economical and territorial planning sector						
Pro 038	Territorial Regional Plan					
Pro 039	Development Regional Program					
Pro 040	Industrial activity plan (Development Plan for industrialized districts)					
Pro 041	Regional Operating Program - DOCUP (Unique Programming Document)					
Pro 042	Specific planning of the interested region					
Regional level - Any other programming and financing instruments						

	Descriptors	Presence of data/arguments	Reference/ Data	Docum. & Refer. Page(s)	Support documentation/tools	Note
Regional level - Any other programming and financing instruments						
Pro 043	Possible other financing and programming instruments.					
Subregional level - Energy sector						
Pro 044	L. 9/91 (Council Energy Plan)					
Subregional level - Transport sector						
Pro 045	Area Transportation Plan					
Pro 046	Traffic Urban Plan					
Subregional level - Landscape protection, landscape plan and bounded areas Sector						
Pro 047	Territorial Landscaping Plan					
Pro 048	DPCM 01/03/91 (Plan on noise reclamation)					
Pro 049	Possible local planning					
Subregional level - Waste sector						
Pro 050	Provincial Plan for waste management					
Subregional level - Landscape protection, landscape plan and bounded areas Sector						
Pro 051	Bounded areas by local planning instruments					
Subregional level - Socio-economical and territorial planning sector						
Pro 052	Industrial activity plan (Plan of land settlement production)					
Pro 053	Possible local planning					

	Descriptors	Presence of data/arguments	Reference/ Data	Docum. & Refer. Page(s)	Support documentation/tools	Note
Subregional level - Local urbanistic instruments						
Pro 054	Provincial Territorial Plan					
Pro 055	Other local urban instruments					
Normative references						
Pro 056	List of reference normative					
Fulfilment and implementing time / modification						
Pro 057	Indication of the connected intervention. Indication of the scheduling plan.					
Pro 058	Actuality of the project and motivation of the eventual subsequent modifications.					
Pro 059	Possible disharmony in the forecasts.					
Functionally connected project						
Power lines						
Pro 060	Added plans and programs related to power line					
Pipeline						
Pro 061	Added plans and programs related to pipeline					
Other projects functionally connected						
Pro 062	Added plans and programs related to other projects functionally connected					