1.1.3 DIFFERENCES BETWEEN **SEAP**, **SECAP AND SUMP**

A fundamental prerequisite for a proper harmonization of SEAPs/SECAPs and SUMPs is an in-depth understanding of the features of each plan.

The following table compares the respective approaches (Table 1).

ISSUE	SEAP	SECAP	SUMP
TIME-SPAN	To 2020	To 2030	Long term (min. 10 years)
FIELDS OF ACTION	• Municipal buildings (energy, heating and cooling plants) • Tertiary {non-municipal) (energy, heating and cooling plants) • Residential buildings (energy, heating and cooling plants) • Transport • Public lighting • Green public procurement • Local electricity production • Local heat/cold production • Others (e.g. industry, agriculture, forestry, fisheries)	• Municipal buildings (energy, heating and cooling plants) • Tertiary {non-municipal) buildings (energy, heating and cooling plants); • Residential buildings (energy, heating and cooling plants); • Transport • Public lighting • Green public procurement • Local electricity production • Local heat/cold production • Others (e.g. industry, agriculture,forestry, fisheries) • Land Use Planning • Environment & Biodiversity	Mobility and transport of people and goods in urban and sub-urban environments ('functioning cities')

ISSUE	SEAP	SECAP	SUMP
RELEVANCE OF A LOCAL AUTHORITY'S TERRITORIAL SIZE	No technical relevance, however complexity increases with the size of the local authority's territory		Urban and sub-urban contexts of such a size where a balanced development of all transport modes is feasible and realistic (typically the population of the functioning area is above 100.000, even although cases of smaller areas exist)
NEED FOR VERTICAL AND HORIZONTAL INTEGRATION	Highly relevant, as different levels of governance and different departments of the local authority should be will be involved in planning for an effective and satisfactory action		Highly relevant, as different levels of governance can be involved in planning (esp. relevance of vertical integration) the whole metropolitan area should be addressed
PROCESS STEPS	• Political commitment • Involvement of stakeholders • Planning • Baseline definition • Adapting administrative structure • Establishment of a long-term vision • Identification of clear objectives • SEAP elaboration • Actions implementation • Monitoring and reporting progress		• Political commitment • Context analysis • Initiation of stakeholders' involvement process • Definition of vision, objectives, indicators, measures • Elaboration Ex-ante evaluation (including a cost/benefit analysis) • Definition of scenarios • Implementation of actions • Monitoring and evaluation
OBJECTIVES	(At least) 20% CO_2 emissions reduction by 2020	(At least) 40% CO_2 emissions reduction by 2030 and climate adaptation	• Accessibility • Balanced development of all transport modes • Reduced environmental impacts (including, among others, CO_2 reduction) • Improved road safety and security • Optimized land use in urban areas • More attractive cities • Better quality of life for citizens

ISSUE	SEAP	SECAP	SUMP
RELEVANCE OF PARTICIPATORY APPROACH	Highly relevant to inform, trigger activities and guarantee acceptance of stakeholders		
DEFINITION OF BASELINE	Comprehensive overview of energy generation and consumption in the municipality	Comprehensive overview of energy generation and consumption Risk and vulnerability assessment	Context analysis mainly based on transport infrastructure, mobility, and socioeconomic data

INDICATOR	A SEAP must include the following indicators:
	• % Reduction of CO_2 emissions
	• Energy use, generation from RES and savings indicators for each action [MWh]
	Moreover, a SEAP should include customized "activity indicators" to monitor actions, e.g.:
	• Energy delivered by electrical vehicles charging stations [kWh/year]
	• Public lighting systems electrical consumption [kWh/lighting pole/year]
	• Litres of water delivered by public water houses [L]
	• Photovoltaic systems electricity production [kWh/year]
	• Amount of ligneous biomass consumed [kg/year] and thermal power delivered to district heating final users [kWh/year]
		A SECAP must include the following indicators:
		• % Reduction of CO_2 emissions
		• Energy use, generation from RES and savings indicators for each action [MWh]
		• Vulnerability-related indicators, e.g.:
		  • length of transport network (e.g. road/rail) located in areas at risk (e.g. flood/drought/heat wave/ forest or land fire)
		  • number of consecutive days/nights without rainfall
		• Impact-related indicators, i.e.:
		  • % of habitat losses from extreme weather event(s)
		  • % of livestock losses from pests/pathogens
		• Outcome-related indicators, i.e.:
		  • % of transport, energy, water, waste, ICT infrastructure retrofitted for adaptive resilience
		  • % of coastline designated for managed realignment
		  • % of forest restored
		Moreover, a SECAP should include customized "activity indicators" to monitor actions (see SEAP column on the left).
			A SUMP should include environmental/energy indicators (e.g. reduction of CO_2, CO, NOx, SOx, PM10, PM 2.5, VOC, fuel consumption, increase in number of vehicles running on alternative fuels).
			• Each SUMP measure, moreover, requires specific indicators. A few examples are provided of the most common indicators used:
			• Public transport: network size, bus Km/year, passengers/year
			• Cycling: network size, trips per year, no. bikes and stations for bike sharing
			• Transport system: limited traffic areas (extension);
			• Car sharing: cars, Km/year;
			• Traditional vehicles trips/year;
			• Freight traffic in peak time;
			• Parking policies: park and ride places; pay and display areas; fare system;
			• Motorization rate;
			• Modal split;
			• Road safety: accidents/year; fatalities/year.
			• Public administration transport costs (investments and running costs per year);

ELABORATION OF SCENARIOS	Limited relevance: there's a single scenario: 2020 compared to the baseline year (Baseline Emission Inventory - BEI)	Limited relevance: initial and final (2030) scenarios and optional "long term scenario" beyond 2030	The elaboration of scenarios (1, 2 and 3) is a distinctive feature of SUMP elaboration

ISSUE	SEAP	SECAP	SUMP
CENTRALIZED MONITORING	Report to Covenant of Mayors Office		Each local authority responsible for its own monitoring and evaluation
COST & BENEFIT ANALYSIS	Recommended but not mandatory		Recommended when selecting actions
REPORT	Monitoring Emission Inventory (MEI) every four years, standardized and mandatory report submitted every two years		Not formalized

Table 1: Main differences between SEAP/SECAP and SUMP