

Table S5. Summary of societal pressures identified from international bodies (n=24) as well as the target variables for sustained observations. Numbers indicate the percentage of the international bodies addressing each of them.

	%	
PRESSURES	Conventions	TARGET VARIABLES
Loss of resources: habitats / biodiversity (including overfishing)	92	Species presence/absence and distribution (from microbes to marine mammals), status of populations (e.g. abundance of commercially important, migratory, and “iconic” species), fisheries production, captures and by-catch, extent (cover) of living benthic habitats (coral reefs, seagrasses, mangroves)
Climate change	50	Primary productivity, harmful algal blooms, coral bleaching (extent)
Pollution / eutrophication	46	Phytoplankton diversity and biomass, presence of toxic, waterborne pathogens, harmful algal blooms
Coastal development	38	Extent (cover) of living benthic habitats (coral reefs, seagrasses, mangroves)
Invasive species	33	Range (presence) and abundance of invasive species
Solid wastes	29	Volume and/or weight marine debris
Ocean acidification	21	Calcareous phytoplankton abundance, coral skeletal density
Extreme weather events	21	Extent (cover) of living benthic habitats (coral reefs, seagrasses, mangroves) susceptible to storms, hurricanes, extreme rainfall and sedimentation
Noise	21	Movement of marine mammals (cetaceans)
Mining	8	Diversity of deep sea benthic species