Measures for the reduction of fuel consumption and CO_2 emissions in inland navigation

		Support of replacement of older engines by those with modern technology
1.	Keywords	Reduction of emissions, inland ship, new motor technology, motor management systems, energy sources or energy carriers
2.	Short description	Promotion of new motor technologies by doing away with long transition periods. Adjustment of the regulations
3.	Objective & target	By replacing the number of many old motors still in use with new motors as well as using energy sources and carriers that are new to shipping it is possible to significantly improve energy efficiency and markedly reduce exhaust emissions in the foreseeable future
4.	Key success factors	The willingness of the government/authorities (politicians) to take action. Financing the switch
5.	Innovative aspects	General boost to innovation. Adoption of innovations from other sectors
6.	Benefits for users	Energy savings, image as a sustainable, environmentally friendly means of transport
7.	Geographic area	All waterways
8.	Status	Can be implemented in the medium term
9.	Difficulties met	The problem of financing
10.	Year(s)	2020-2030
11.	Users, stakeholders	The inland shipping industry, motor manufacturers, classification societies, research institutes
12.	Contact person	See point 11
13.	Costs & financing	Relatively high. Financing models and environmental taxes on old motors as well as financial assistance remain to be clarified
14.	Website / links	Numerous specialised links
15.	Available data, publications	Numerous, e.g., information from motor manufacturers and research institutes

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16.	Added value: possibility for application elsewhere	Use of the technologies and research findings in maritime shipping
17.	Further information	Existing applications or use of alternative energy sources or carriers in inland shipping (diesel-electric motors, hybrid technologies, natural gas, hydrogen etc.)
18.	Filled in by	Beat Bürgi, Shipping Department, Federal Office of Transport, CH-3003 Berne
19.	Date	22nd February, 2011