INTERNATIONAL ROAD FEDERATION
FÉDÉRATION ROUTIÈRE INTERNATIONALE
FEDERACIÓN INTERNACIONAL DE CARRETERAS

IRF Policy Statement
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Context and Stakes

Environmentally sustainable roads represent an investment in the long-term prosperity of both our planet and our society.

Today more than ever, it is evident that economic development and transport are inextricably linked. Just as development increases transport demand, so, conversely, the availability of transport stimulates further development by enabling trade and economic specialization. Growth and poverty reduction cannot be achieved without physical access to resources and markets. Similarly, quality of life flows from physical access to jobs, health, education and other amenities.

In the transport-sector CO2 emissions represent 23% of overall CO2 emissions from fossil fuel combustion. The sector accounts for approximately 15% of overall greenhouse gas emissions (OECD/ITF 2010). With emissions predicted to increase by two thirds over the next thirty years, any credible and coherent future strategy must emphasise innovative thinking and cooperation across the full range of stakeholders aimed at improving the environmental performance of the road sector, without unduly compromising the mobility and access on which economic development and growth largely depend.

Finding the right balance between commitmentto reduce the environmental impacts of the road sector on the one hand, and economic development, trade and mobility imperatives on the other, requires a comprehensive mix of policy, fiscal and regulatory measures - with the capacity to determine changes in travel behaviour as well as the most appropriate logistical responses and technology choices. IRF makes a commitment to a stronger pro-active role and a broader view of the interdependencies and public/private hierarchies. Price mechanisms alone are likely to be neither politically or socially acceptable, nor sufficient to adequately address the challenges.

Rather, price mechanisms must be viewed asjustone potential component within a much wider strategic approach that better reflects the full complexity and interdependence of the issues that need to be addressed. These range from land-use considerations right through to well-documented priorities of, for example, energy and resource conservation, habitat and biodiversity protection, landscaping and health (notably the impacts of growing exposure to noise and air pollution). Questions regarding the durability of existing infrastructures also need to be factored into this already substantial equation, as changes in seasonal weather patterns due to global climate change create new challenges for the design and construction of roads. Coastal zones contribute greatly to GDP around theworld.Anysignificantincreaseinsea levelwill havetremendous negative impact on this economic contribution.

IRF's Position and Recommendations

Achieving sound environmental and sustainability outcomes is an integral part of IRF members' policy and practice. They are fully committed to:

- Safeguarding the environment whenever possible;
- Mitigating adverse effects through proactive consideration of environmental issues at every stage of planning and implementation;
- Managing and using resources efficiently;
- Continually improving infrastructure environmental performance.

IRF recognizes the multiple benefits of sound environmental impact assessment and management, incorporating the efficient use of materials and energy. It is further committed to ensuring that the road infrastructure sector increasingly contributes at the forefront of global efforts to reduce greenhouse gas emissions.

In this context, IRF advocates that sustainable management is most effective when environmental

challenges and opportunities are taken into consideration early and pro-actively at every stage of the life-cycle of road infrastructure. The return on investment metrics (ROI) should broaden the range of metrics to include mobility and access. In keeping with its commitment to promoting this fundamental objective, IRF makes the following core recommendations:

Political, regulatory and fiscal measures

- Cost-benefit analysis should be the basis of political, regulatory or fiscal measures aimed at protecting the environment;
- Efficient land-use planning is an essential pre-requisite for determining the optimum interfaces between the environment, roads and users;
- Setting guidelines and green rating systems for environmentally effective road infrastructure planning, construction and management is an important tool for stimulating the application of best practices and to this end it should be better promoted;
- Environmentally friendly products and processes developed by the private sector should be given recognised value within procurement procedures.
- Comprehensive and coherent transport policies, including promotion of effective public transport as well as eco-driving, are a key starting point for addressing the environmental challenges associated with the road sector. Limiting road capacity has proved an unsatisfactory and unrealistic measure for improving environmental conditions. "Stop-and- go" traffic conditions produce comparatively high emissions. "Keep the traffic moving" should be a priority objective of all traffic management initiatives, particularly those in urban areas.
- Operational efficiency of existing infrastructure through more efficient and systematic deployment of Intelligent Transport Systems (ITS) should be encouraged.

Impacts assessment

- Strategic **environmental impact assessment is** a fundamental component of road network planning;
- The development and use of **tools to determine the carbon footprint of road infrastructure and traffic should** be encouraged. These tools can be used to assess and reduce the environmental impact Life-cycle-analysis methodologies should be adopted as a guiding principle for the assessment and selection of materials and technologies.
- Network resilience to climate change, in particular, flood and related risks should be carefully assessed and addressed in the planning process for new road construction and/or the upgrading of existing road infrastructure.

Mitigation

- Landscape improvement should be an integral component of all road construction and rehabilitation projects in order to mitigate the infrastructure environmental impact. It should also be undertaken in a manner that recognizes and respects the associated historical, cultural and community values. Whenever possible, measures to improve the visual quality of the existing road network should betaken.
- Materials and energy are key finite resources, and must be used in a manner that recognizes, and is compatible with, supply limitations and life-cycle costs. Particular emphasis should be given to re-using and recycling resources to the maximum extent.
- Maintenance should be carried out in such a way, so as to reduce the environmental burden it could Incur. When components need to be replaced, alternative technologies and recycling/reuse should always be considered.
- The potential of road infrastructure for alternative energy production should be further investigated.
- Water pollution resulting from road and traffic operations should be carefully assessed and monitored to enable prevention and mitigation of harmful effects.
- Noise pollution must be addressed as part of an integrated approach, taking into account the interactions of pavements, tyres and vehicles.
- Monitoring of all environmental impacts of the infrastructure during the period of operation is crucial in measuring the success of all design and construction considerations and improving any problems that may arise.

IRF believes that, if widely adopted and wisely applied, these recommendations will prove that economic development and protection of the environment need not be irreconcilable goals and that viable green road infrastructure is today a reality.

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info@irfnet.org | www.irfnet.org