

# WWF Dinaric Arc Sustainable Hydropower Initiative

Safeguarding freshwater ecosystems in the Dinaric Arc region



Spring, Bistrica river, Livno, Bosnia and Herzegovina. © Andrija Vrdoljak / WWF-Canon

# A Freshwater paradise

Encompassing Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro and Albania, the Dinaric Arc region is a paradise for endemic freshwater plant and animal species. The region's wetlands are of key significance for people and nature – filtering ground water, offering natural protection from flooding, providing natural resources and ensuring rich habitats for birds. Dinaric Arc rivers, flowing in the most precious canyons in Europe, also provide the ideal conditions for the development of hydropower facilities.

# A new Eldorado for energy in Europe

The Dinaric Arc has entered a phase of economic transition. Energy is seen as a valuable source of income, supported by fast-growing demand. Hydropower is actively promoted by foreign investors as a clean source of energy. The majority of Dinaric Arc countries are heading towards EU accession and have started transposing EU legislation to energy and other environmental fields. They are also parties to the Energy Community Treaty (ECT). The reality is, however, that energy production is far from being sustainable and transparent. Environmental Impact Assessments (EIAs) and Strategic Environmental Assessments (SEAs), when carried out, are of dramatically poor quality.

# IN THE REGION

AN ESTIMATED 573
HYDROPOWER PLANTS ARE
PLANNED FOR ALBANIA,
BOSNIA AND HERZEGOVINA,
CROATIA AND MONTENEGRO.

Source: EuroNatur, Riverwatch, FLUVIUS (2012): Balkan Rivers – The Blue Heart of Europe, Hydromorphological Status and Dam Projects, Report. Vienna, March 2012.

# Renewable isn't always sustainable

With climate change and global demand rising rapidly, "green" solutions including solar, wind, biomass, geothermal, and hydropower offer new opportunities to produce energy. If they are not planned and developed carefully, however, they can have huge impacts on people and the environment. This is particularly true for hydropower development in the Dinaric Arc region, where hundreds of plants are planned.

# WWF's work: the Dinaric Arc Sustainable Hydropower Initiative

Since 2008 WWF has been working with the support of the MAVA Foundation to counteract the damage that badly planned hydropower developments cause to freshwater ecosystems. Believing that economic development can go hand-in-hand with maintaining natural assets and long-term livelihoods, WWF acts at international and regional levels influencing the policies, investors and financiers which contribute to unsustainable hydropower planning and implementation. At a local level WWF works with partner organizations to influence national policies and projects. WWF and partners support sustainable hydropower by:

- · providing scientific information and capacity building
- · evoking commitments and legal requirements
- facilitating discussion and trust-building
- supporting civil society in advocating for transparent planning processes for new facilities
- influencing key decision makers in water and energy utilities, the international hydropower sector, international financing institutions
- fostering a common understanding of sustainable hydropower in the region that works for people, nature and the economy.

## First results

WWF and its partners have started to influence mainstream policy and economic issues as well as public opinion on hydropower matters and have achieved the following first results:

# Alliances with key international NGOs and dialogue with private sector and financial institutions

WWF has developed strategic alliances with Transparency International and has created dialogue with the private sector and international financial institutions to promote sustainable hydropower standards, especially those connected to EU legislation and the recently endorsed Hydropower Sustainability Assessment Protocol (HSAP). WWF plans to increase engagement with financial institutions in particular, as they fund several controversial hydropower plants in the Dinaric Arc region.

#### Modelling sustainable economic activity as an alternative to hydropower

At Livanjsko Polje, Bosnia and Herzegovina, an eco-canton project is being developed to create green businesses, boosting the local economy whilst safeguarding those freshwater ecosystems which would otherwise be compromised by unsustainable development models (e.g. hydropower).

#### In Montenegro unsustainable hydropower development prevented

The Morača river remains one of the few free-flowing rivers in Europe. After several years of advocacy and communications campaigning, led by WWF and local partner Green Home, the tender for the construction of a hydropower scheme on the Morača river failed to attract any investors. The campaign demonstrated that the project would entail high environmental and social costs while not being economically viable. The Morača case was a turning point in the development of the region's hydropower projects, pushing the energy sector and water managers to take environmental impacts into account and ensure transparency and sound economic assessments.

# DINARIC ARC SUSTAINABLE HYDROPOWER INITIATIVE







Photos, from top:

Moraca river going to Skadar lake, Montenegro. © Michel Gunther / WWF-Canon

Grabovica dam on Neretva river, Bosnia and Herzegovina. © Michel Gunther / WWF-Canon

Tourism at Hutovo Blato Nature Park, Bosnia and Herzegovina. © Hutovo Blato Nature Park

#### In Bosnia and Herzegovina massive hydropower projects questioned

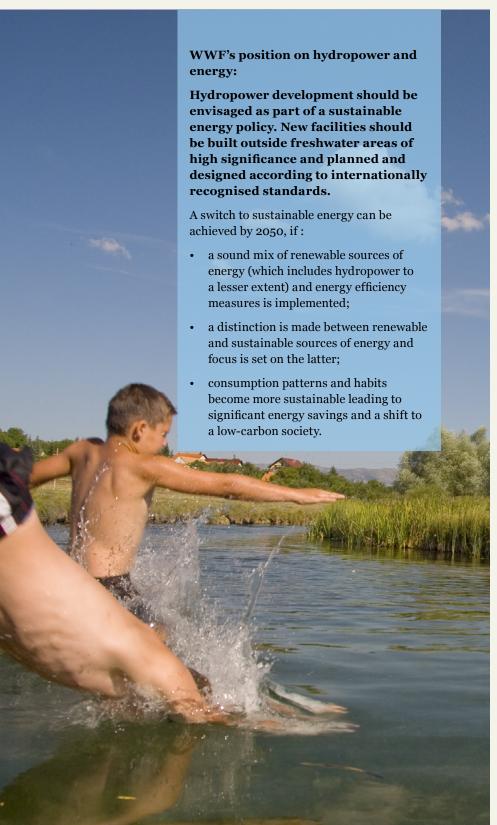
The Upper Horizons project foresees the construction of hydropower plants on the Trebišnjica and Neretva rivers in Bosnia and Herzegovina and Croatia. It would require the diversion of huge amounts of water from the Neretva and Trebišnjica basin with a drastic effect on the hydrology and ecology of the entire eastern part of Herzegovina all the way to the Neretva river delta on the Croatian coast. If it goes ahead, this project will result in the salinization of the Neretva delta and the complete disappearance of agricultural production in the region. It will cause the drying up of the Hutovo Blato Nature Park, one of the largest habitats of migratory birds in the Balkans. The flow of the Neretva River would be affected with unpredictable consequences for fish stock. Thanks to persuasive scientific arguments from WWF, and a campaign led by trained local NGOs, the project is currently undergoing revision.

# **Building on first results**

Around 30% of the major rivers in the Dinaric Arc remain almost or entirely untouched¹. This rare heritage needs to be protected from unsustainable hydropower development. We will keep acting for the future of freshwater resources in the western Balkans. WWF and partners are working to strengthen collaboration with governments, financing institutions, citizens and experts in order to achieve the most sustainable hydropower solutions for the Dinaric Arc.

<sup>1</sup>Source: EuroNatur, Riverwatch, FLUVIUS (2012): Balkan Rivers – The Blue Heart of Europe, Hydromorphological Status and
Dam Projects, Report. Vienna, March 2012.





DINARIC ARC SUSTAINABLE HYDROPOWER INITIATIVE

### Contacts

Petra Remeta Stručna savjetnica za vode i energetiku WWF Mediteran premeta@wwfmedpo.org

Bojan Stojanović Komunikacije za pitanja voda WWF Mediteran bstojanovic@wwfmedpo.org

croatia.panda.org mediterranean.panda.org



© ANDRIJA VRDOLJAK / WWF-CANON

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

www.panda.org/mediterranean