

# AIM - ALPINE SPACE IN MOVEMENT

## TARGETED TO WATER & ENERGY CAPITALIZATION

**The project AIM is co-funded by the European Regional Development Fund  
in the frame of the European Territorial Cooperation Programme Alpine Space.**

**RSE (Lead Partner)**

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Programme co-funded by the  
EUROPEAN UNION



Alpine space  
In Movement



## AIM Methods and approach

AIM capitalised the achievements of several ASP projects (2007-2013) dedicated to renewable energy production, water resources management and the conservation of (aquatic) ecosystems (SHARE, Alp-Water-Scarce, SedAlp, SEAPAIs, ECONNECT, recharge.green).

### Why ?

**Valorising and capitalising the main ASP**

**project's achievements** in terms of policy & management development into effective dissemination and target the relevant policy level/actors to impact on national/regional policies.

### What ?

In the framework of the Alpine

Space Programme (ASP) 2007-2013, a consistent number of projects directed their attention on the optimization of water resources use and the promotion of renewable energy production.

In this context, **hydropower is the most important renewable energy source** in Alpine areas, but it also creates **serious environmental impacts**.



### What else ?

**Setting the scene for the 2014+ project generation,**

by (1) crossing the achieved results with beneficiaries needs, (2) mapping the European/regional/transboundary/national programs with possible synergies and (3) by identifying key relevant policy actors and institutional competences to be addressed.

### How ?

**Tracking the accomplished**

**results of the Alpine Space Programme projects (2007-2013),** in the thematic fields of renewable energy production, water resources management and preservation & restoration of (aquatic) ecosystems and identify the transnational needs of the entire Alpine Space Region.





# STAKEHOLDER WORKSHOPS & SEMINARS

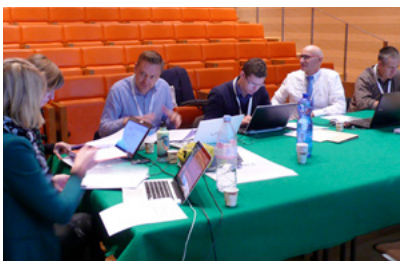
AIM as a « MEGAPHONE »

## SOME EVENTS :

**Slovenia, Ljubljana**  
February 2014



**Austria, Vienna**  
November 2013



**Germany, Munich**  
June 2013



**Switzerland, Lausanne**  
September 2014



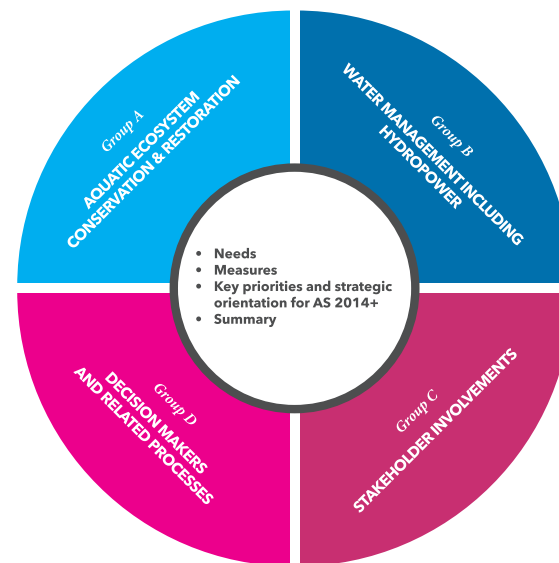
**Italy, Mestre**  
November 2014



**France, Megève**  
October 2014



## AIM world-café topics for STAKEHOLDER DISCUSSIONS



## AIM project promoted BY THE PRESS



Eine Boku-Studie aus Währing zeigt auf, wie sich der Gewässerschutz mit weiterer Nutzung verträglich lässt.

### Wiener Wasser: Boku mit Studie zu Fließgewässern

■ (wb). Großstädte in aller Welt beneiden Wien um sein frisches Hochqualwasser. Bis zu 380.000 Kubikmeter werden täglich über die Hochquellleitungen in unsere Hauptstadt geleitet. Laut einer aktuellen WWF-Studie, basierend auf einer wissenschaftlichen Untersuchung des Instituts für Hydrobiologie und Gewässermanagement der Uni-

**MÉGÈVE** | Il est nécessaire de s'organiser pour préserver l'eau dans un contexte de réchauffement climatique

### États généraux de l'eau en montagne : il faut agir !



Les participants ont été au fil du temps des acteurs de l'eau pour préserver leur territoire.

Le projet est né d'une volonté de rassembler les acteurs de l'eau pour préserver leur territoire. Il s'agit d'un projet de concertation et de co-construction de solutions.

Un sujet au cœur des préoccupations européennes

La préservation de l'eau est un enjeu majeur de la politique européenne. Elle est au cœur des préoccupations des citoyens et des décideurs. Le projet est né d'une volonté de rassembler les acteurs de l'eau pour préserver leur territoire.

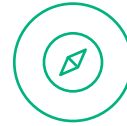


Les participants ont été au fil du temps des acteurs de l'eau pour préserver leur territoire.



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## AIM 2014+ priority topics

*Better data generation & HARMONIZATION*

### *Better data generation & HARMONIZATION*

- Constant and comprehensive relevant data collection is needed, by which data bases and results of projects and supporting analyses must be constantly verified and upgraded.
- Comprehensive metadata information needs to be included in all project web pages.
- Basic databases (for the Alpine space) should be hosted at European institutions or network to guarantee maintenance, as e.g. the WISE/EU system.

### *Improved stakeholder involvement & COMMUNICATION*

- Investigation of the needs and expectations of stakeholders has to be done at the beginning of the project.
- Stakeholders (including decision makers) have to be involved from the project preparation phase to the final results presentation phase
- Improvement of communication and collaboration between the different levels is needed (EU - national - regional - local).
- Improved communication and product-transfer to end-users is needed.
- There is also need for harmonization of correlating tools/ products that deliver solutions & are promoting good practices and successful experiences to stakeholders.

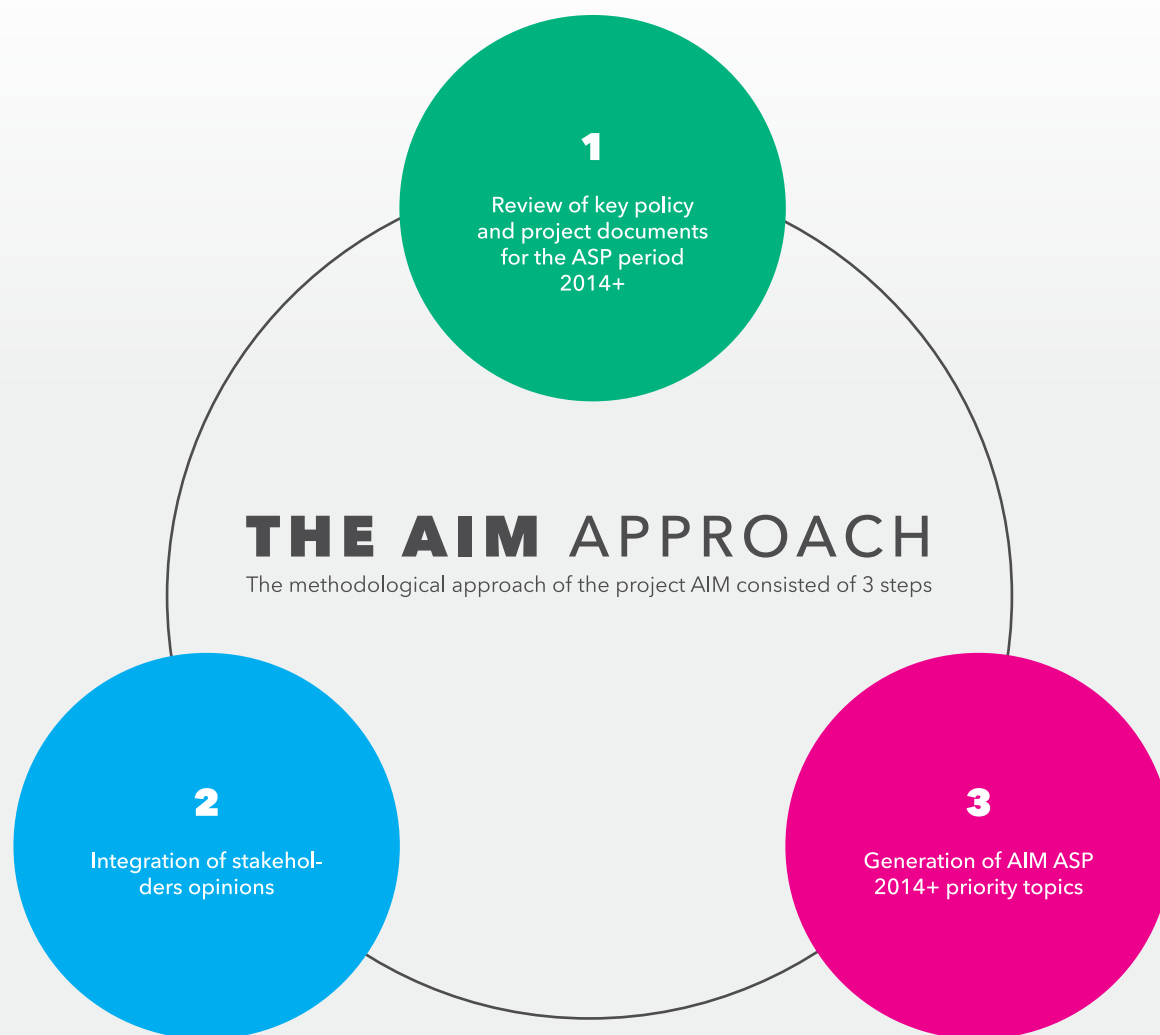


### *Integration and valuation of the ECOSYSTEM SERVICES CONCEPT*

- Case studies in future ASP are needed - about ecosystem services in real life and to test different methodologies & see if they are really appropriate.
- Better understanding about valuating ecosystem services is needed.
- We must acknowledge that we can't put a monetary value on all nature-related issues.
- Ecosystem functioning must be THE precondition for ecosystem service.
- Ecosystem service provision must not be in conflict with concept of the Water Framework Directive.

### *Strategic planning approaches ON VARIOUS SPATIAL LEVELS*

- Integration of all relevant sectors (inter- and trans-disciplinary) into strategic planning is needed.
- This is linked to kind of a "MASTERPLAN", to make transparent decisions and have better balance between hydropower production, other water uses and ecosystem conservation.
- There is need to think about the downstream-catchments outside the ASP to better define the public interest and seek for governance on the large scale.



**Guidance document for the harmonization of water resources management, hydropower production and aquatic ecosystem conservation in the Alps for the Alpine Space Programme Period 2014-2020**

As part of the communication and knowledge transfer strategy, this document has the objective to inform relevant stakeholders, including policy- and decision makers at all levels, from local to regional to transnational about key conclusions of the AIM project. The overall goal of the AIM 2014+ guidance is to stimulate further development of, and support for, the harmonization of water management, renewable energy production from hydropower and aquatic ecosystem conservation in the European Alps – herein after called “the **water-energy nexus** in the Alps”. It is expected that the implementation of AIM outcomes will result in enhanced sustainability of hydropower programmes. That will include appropriate site selection for new hydropower developments but also conservation of riverine ecosystems in the Alps in order to guarantee ecosystem functioning and integrity, and further to provide aquatic ecosystem services for multiple users.



**GUIDELINES** for the future



## AIM PARTNERSHIP



Download your tool from  
[www.aim2014.eu](http://www.aim2014.eu)

### *The main results of the AIM project are:*

1. Alpine Space (2007-2013) stakeholder database
2. Website 2.0 of the AIM project, including forum & social network
3. Updated Alpine Space (2014+) stakeholder database
4. Seminar: Brain-storming with the Stakeholder Panel (Austria)
5. Panel discussion with stakeholders of target groups (Slovenia, France, Switzerland and Germany)
6. Final Transnational seminar addressed to Alpine Space stakeholders (Italy)
7. Database/informative factsheet of the project results and achievements (2007-2013)
8. Multi-sector & interdisciplinary evaluation and assessment of accomplished results & outcomes
9. Project results in terms of economical valorisation of ecosystem services
10. Weak points from the interconnection between project's results and AS regional targets
11. Database/informative sheet of key relevant policy actors and their specific competence
12. Cross-table/matrix with achieved results/beneficiaries
13. Regional GIS-web database
14. Guidelines for setting the scene for the project generation 2014+

### Examples of tools and results, free available for end-users, are the following:



*SESAMO*

A software for Multi Criteria Analysis allowing to rank different alternatives on the basis of multiple conflict- ing objectives.



*VAPIDRO-ASTE  
4.0*

Tool to evaluate the hydropower residual potential in a water course taking into account the analysis of the catchment, the actual withdrawals and restitutions scheme and the application of the Minimum Instream Flow constrains.



*HALTFLOOD*

A software tool with a GIS interface to support operation of hydropower reservoir for flood attenuation.



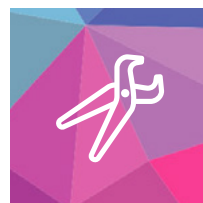
*SMART  
Mini-idro*

An EXCEL tool to evaluate the main hydropower project parameters, considering the flow duration curve, the available heads and the types of turbines to be installed, the range of discharges to be used, costs, benefits and financial analysis.



### EUROPEAN FISH INDEX (EFI+)

A fish-based method to assess the ecological status of European running waters in support of the Water Framework Directive. General information about the EFI+ is available at: <http://efi-plus.boku.ac.at> (Developed under EU FP6)



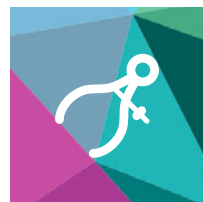
### MORIMOR-GIS

A morphodynamic 1D model to evaluate the sediment transport and river morphology changes, in particular as consequence of large mass movement or sediment release during flushing operations. Useful to avoid inconvenient environmental problems.



### WATER SCARCITY INDEX (WSI)

A local early warning system in order to help decision makers during water scarcity or drought periods for solving conflicts between hydropower production and agriculture. The index is based on the analysis of the main hydro-meteorological parameters: discharge, rainfall, snow water equivalent, temperature and solar radiation.



### ACTION TOOL FOR SEAP

Tool to support municipalities in selecting actions that suit to their individual requirements and capabilities, in terms of (1) what so far has been done regarding energy efficiency, adaptation and mitigation; (2) what will be done in the future, as core part of their SEAP.

## Observer Partners

**PSAC** - Permanent Secretariat of the Alpine Convention (Austria)  
**SJE** - Schneider & Jorde Ecological Engineering (Germany)  
**US** - University of Stuttgart (Germany)  
**JRC** - European Commission Joint Research Centre - Institute for Environment and Sustainability (Italy)  
**UNESCO IHE** - Institute for water education (The Netherlands)  
**CNR** - Compagnie Nationale du Rhône (France)  
**APER** - Assorinnovabili (Italy)  
**ARPAV** - Veneto Regional Land Safety Department  
**VR** - Veneto Region (Italy)  
**ITCOLD** - Italian National Committee on Large Dams (Italy)  
**PRC** - Soča Valley Development Centre (Slovenia)  
**SENG** - Soške Elektrarne Nova Gorica, Hydropower producer on the Soča River (Slovenia)  
**IRSNC** - Institute of the Republic of Slovenia for Nature Conservation (Slovenia)

**FRIS** - Fisheries Research Institute of Slovenia (Slovenia)  
**ME** - Italian Ministry of the Environment, Territory & Sea Preservation (Italy)  
**ASC - ASCONIT** Consultants on environmental issues (France)  
**ICPDR** - International Commission for the Protection of the Danube River (Austria)  
**KC** - Kyoto Club (Italy)  
**TOR** - Torino Province (Italy)  
**ARPAVDA** - Valle d'Aosta Regional Land Safety Department (Italy)  
**POLE4** - Municipality of 18th District of Budapest, Thematic Pole Low Carbon Communities (Hungary)  
**WWF Austria** (Austria)  
**VETMED** - University of Veterinary Medicine Vienna, Research Institute of Wildlife Ecology (Austria)  
**BMLFUW** - Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management (Austria)







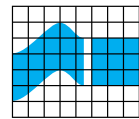
**The AIM partnership represents a balanced combination of well-established institutions with recognized know-how and experience on renewable energy production, water resource management and conservation & restoration of (aquatic) ecosystems.**

The consortium is composed by selected key institutions, in particular:



**RSE**

*(Renewable Energy Production)*



**INŠTITUT  
ZA VODE  
REPUBLIKE  
SLOVENIJE** | *Institute  
for Water of  
the Republic  
of Slovenia*

**Institute for Water of the Republic of Slovenia**

*(Water Resource Management)*



**University of Natural Resources and Life  
Sciences, Vienna**

*(Institute of Hydrobiology and Aquatic Ecosystem  
Management)*



**AEM**

*(Elected Representatives from the Alpine  
Mountain Region)*

Furthermore, a permanent “stakeholder panel” integrated by representatives of target groups from the Alpine Space countries, plus twenty-four Observer Partners were nominated at the beginning of the project and were involved in key decisions and meetings, to guarantee a concrete regional scale participation.



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Création Cybergraph Chamonix