

Transboundary Water Issues In Macro-Regional Context: the Danube Basin

Budapest, Hungary
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The ASEM Cooperative Mechanism:

ASEM Network for Science, Technology and Innovation Cooperation in Water Resources

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Outline

1. EU Mechanism Promotes Water Innovation
2. Welcome to ASEM WATER
3. ASEM WaterNet: Progress Report
4. Request and Suggestion

Section 1 EU Mechanism Promotes Water Innovation

- ❖ Joint Programming Initiative on water (JPI)
- ❖ European Innovation Partnership on water (EIP)
- ❖ Water Supply and Sanitation Technology Platform (WssTP)

Agencies Perspectives	JPI	EIP	WssTP
Features	1.End-user involvement 2.RDI agenda and activities harmonization 3.Supporting leadership	1.Innovative tools and policies seeking 2.Innovation dissemination	1.Innovative methodology and technology 2.Deliberative and decision-making
Differences	1. RDI 2. 2P(public to public) 3. Actions on agendas and calls for proposals	1. Innovation 2. 3P (public-private-public) 3. Mix of implementation mechanism	1.R&D platform 2.Industry to public 3.Fundamental research to implementation for users' benifits
Complementarities	1.JPI :innovation 2.EIP :policies and tools · 3.WssTP :technologies and methodologies They are independently existed without any overlapping		
Similarities	1.Affiliate to EU 2.Share key stakeholders 3.Between industries, research group, policy-makers and water-users		

Section 2 Welcome to ASEMWATER

1. What Is ASEMWATER
2. Background
3. ASEMWaterNet Establishment

1 What is ASEMWATER?

ASEM Water Resources Research and Development Center

- 💧 ASEM Mechanism
- 💧 Research and Development
- 💧 Science and Technology Cooperation
- 💧 Public Non-profit
- 💧 International Organization in Water Resources

2

Background



Asia-Europe Meeting
ASEM - 2010.10.04-05

CHAIR'S STATEMENT
Of the Eighth Asia – Europe Meeting
Brussels, 4-5 October 2010

"Greater well-being and more dignity for all citizens"

- The Eighth Asia-Europe Meeting was hosted by Belgium in Brussels on 4 and 5 October 2010. The meeting was attended by leaders of European countries, the European Commission and the European Parliament.
- The overarching theme of the meeting was 'Greater well-being and more dignity for all citizens'.
- A warm welcome was extended to all participants who attended an ASEM Summit.
- Leaders reaffirmed the strategic dialogue and cooperation between Asia and Europe on the basis of equal partnership, mutual respect and benefit. They noted with appreciation the results of the meetings of the Education Ministers, the Foreign Ministers, the Energy Ministers, the Transportation Ministers, the Finance Ministers and the Culture Ministers held since the Seventh Asia-Europe Meeting and endorsed their recommendations.
- The meeting established common ground between Asia and Europe on topical issues of mutual interest to both regions as follows:

TOWARDS MORE EFFECTIVE GLOBAL ECONOMIC GOVERNANCE

- Leaders held a candid, open and fruitful discussion on the present global economic situation. They issued a separate Declaration reflecting their common views.

37. Leaders stressed the importance of sustainable forest and water resources management and the need to cooperate by exchanging scientific research and by pooling experiences and best practices. They requested their Ministers to conduct a concrete and result-oriented dialogue on these issues in the early part of 2011. They recalled that the UN General Assembly proclaimed 2011 as the International Year of Forests. Leaders expressed their support for the UN Collaborative initiative on Reducing Emissions from Deforestation and Forest Degradation (REDD+) in developing countries. They noted the contribution of the Forest Law Enforcement Governance and Trade Action Plan (FLEGT) of the European Union and of parallel Asian initiatives, in cooperation with partners, in addressing illegal logging and improving transparency in forestry operations. **They noted China's initiative to establish an ASEM Water Resources Research and Development Center in Hunan Province.**

38. Leaders welcomed the outcome of the High Level Dialogue Meeting, held in New York on 22 September 2010, as a contribution to the International Year of Biodiversity. They urged the 10th

society in the design and implementation of environmental protection measures substantially contribute to changing people's attitudes and bringing about sustainable production and consumption patterns. They expressed their determination to encourage these as established features of their policies.

40. Leaders recognized the importance of promoting sustainable forms of production and consumption, among others through the promotion of a green, low-carbon economy. It is needed because of the limitations in available natural resources. It offers opportunities for it brings about new markets, new investments and creates new employment. Yet, it also raises challenges as to the fair distribution of its costs and benefits. Leaders noted the rising interest among ASEM partners for developing carbon markets and hence, supported the objective of scaling up finance and investment through the development of the international carbon market. Leaders committed to intensify ASEM cooperation in raising awareness, in exchanging information and best practices, in training experts in resource efficiency and in making

8

They noted China's initiative to establish an ASEM Water Research and Development Center in Hunan Province

Strengthening S&T Cooperation on Water Management

Changsha Declaration

FP6: Multi-stakeholder Platform for ASEM S&T Cooperation on Sustainable Water Use

Changsha Declaration



Resources

Statement

Ceremony



2

Background

Water Challenges in Asia and Europe



FLOOD



Water Challenges in Asia and Europe

DROUGHT



Water Challenges in Asia and Europe



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POLLUTION

Water Challenges in Asia and Europe

- 💧 Agricultural Consumption
- 💧 Population Growth
- 💧 Industrialization
- 💧 Urbanization



Gap between water supply and demand, soil erosion.....

2 Background

Water In China

Chinese Government pays closer attention to

Water resources conservation and utilization

New Type Urbanization

Ecological Culture



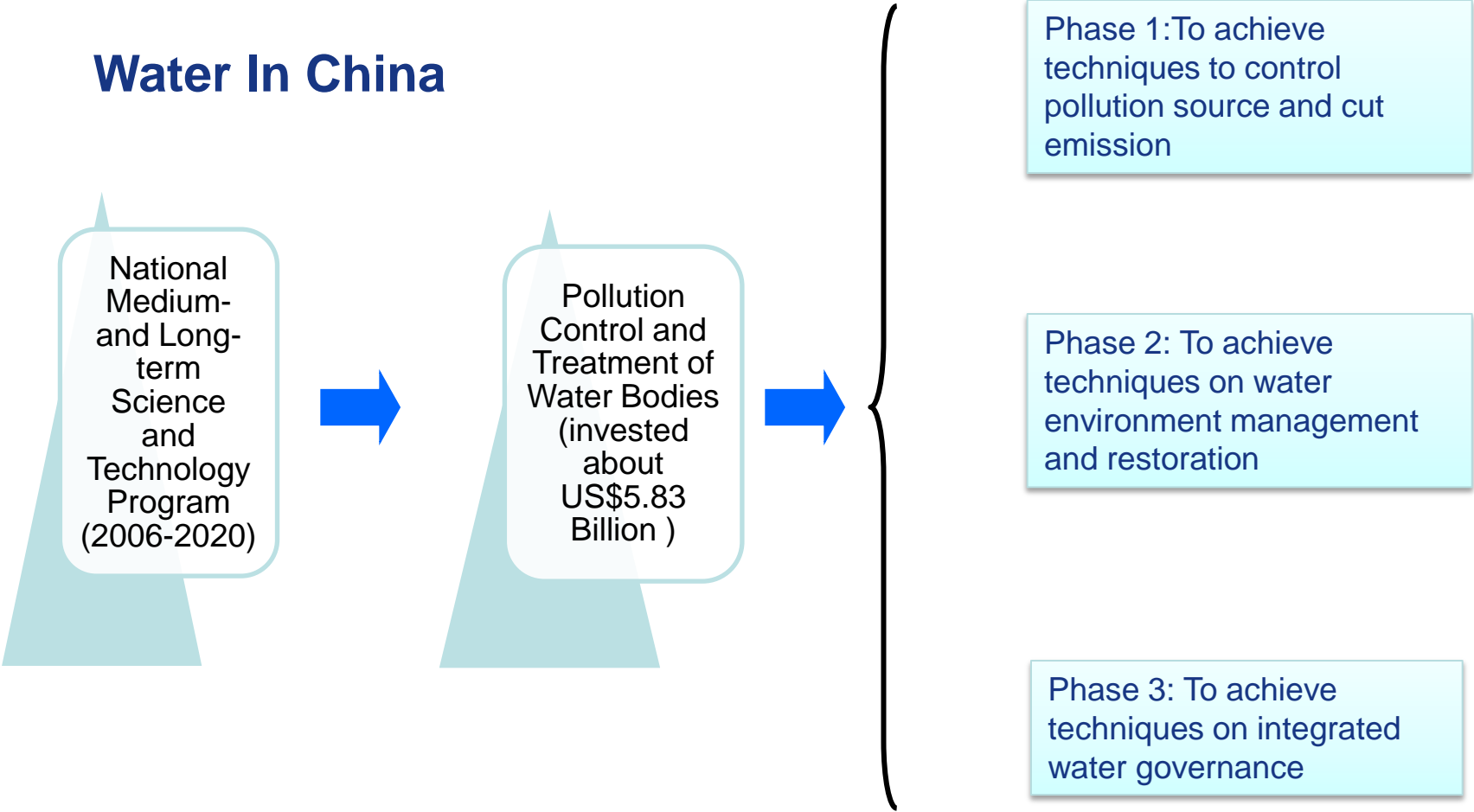
Law

Water-related reform

Technology innovation

Pollution treatment, etc.

Water In China



2

Background

Hunan' s Performance

Hunan's construction of a '**Two-Oriented**' society

Resource-conserving-oriented Society

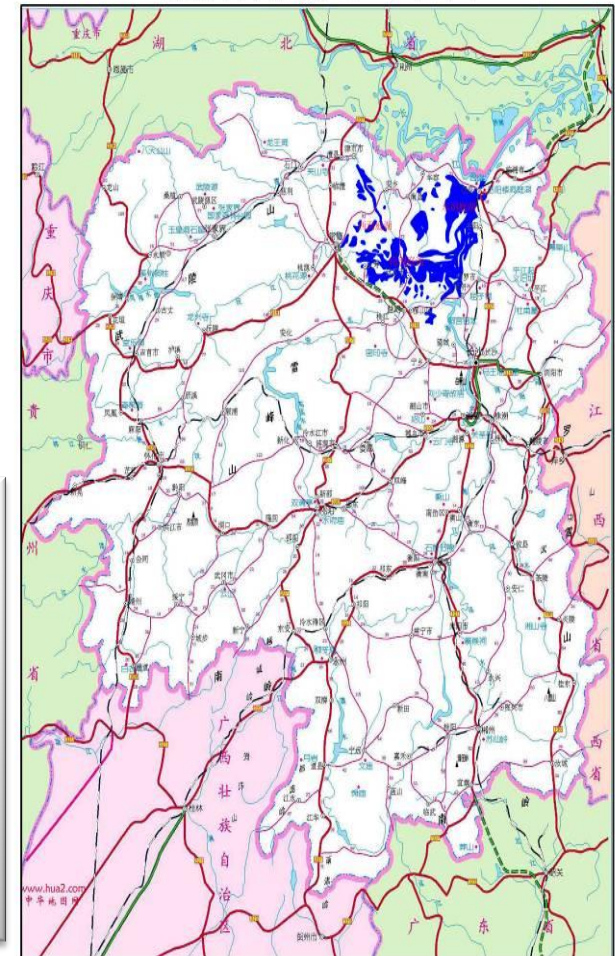
Environment-friendly-oriented Society

Water Resources in Hunan Province

Rich in total volume ,short in average level

Population	71.19 million
Area	211.8 thousand Km ²
Rivers	5,331 (boasting a length of over 5 Km)
Runoff	207.6 billion m ³ per year
Consumption per capita	3844 m ³
Investment	US \$ 2.7 billion (Dongting Lake in 2011-2015) US \$ 9.5 billion (Xiangjiang Valley in 2011-2015)

湖南省洞庭湖地理位置图



Case 1:

Dongting Lake State Eco-economy Zone (invest **US\$ 10 Billion**)

Ecology Construction in the Dongting Lake

234 highly-polluting paper mills were closed down.

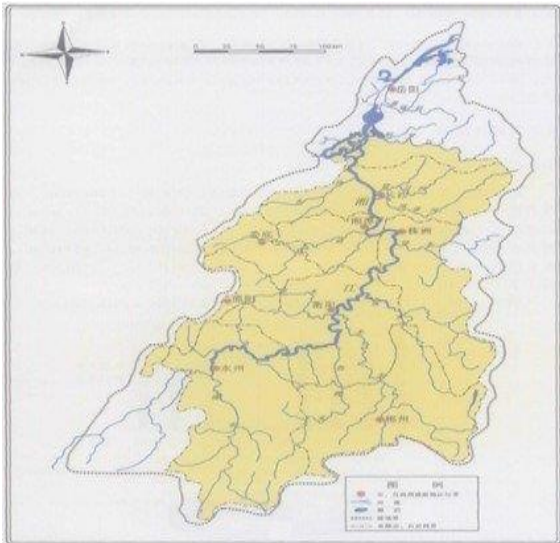
Grade III Surface Water standard

Supervision (policies, laws,.....)



Case2: Pollution Control along the "Oriental *Rhien*" - Xiangjiang River Basin

Xiangjiang River



Rhien Basin



Perspective	Xiangjiang River	Rhien River
Mother river	Hunan Province	5 Countries Co-sharing
Length	969 km	1320 km
Watershed area	94,700 km ²	25,2000 km ²
Navigatable mileage	670 km	875 km
Average annual runoff	205 billion m ³	215 billion m ³
Navigation Period	All year round	All year round

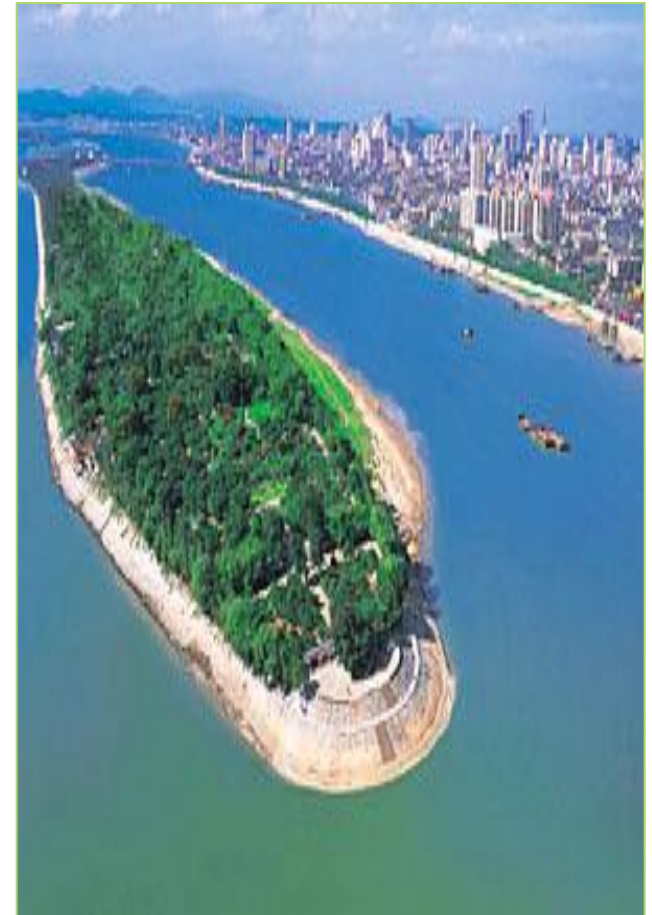
Case 2:

Pollution Control along the "Oriental Rhien" - Xiangjiang River Basin

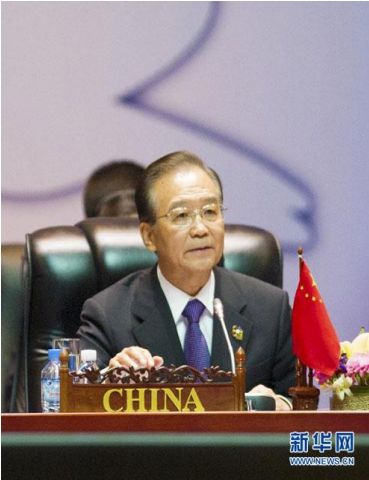
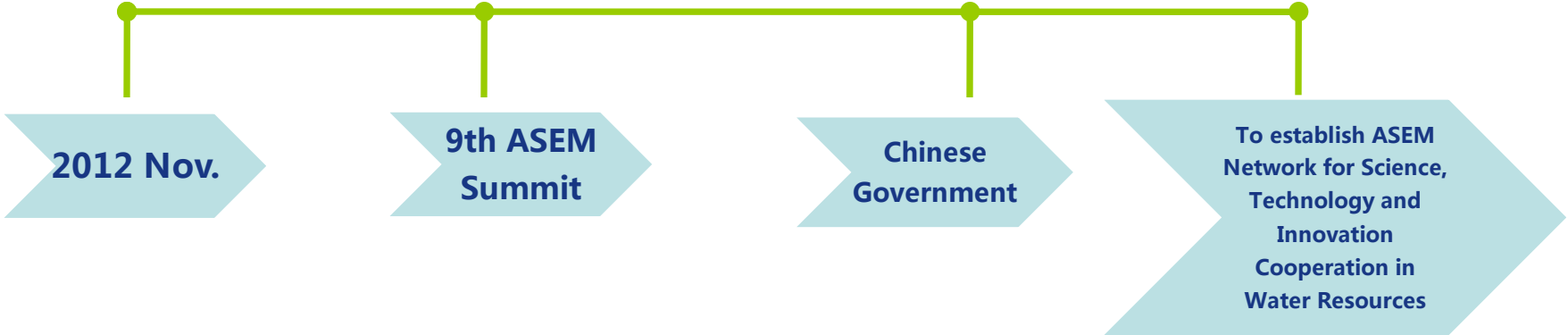
Xiangjiang River Clear Water Action

200 provincial-level treatment projects and
400 city-level projects


927 treatment projects and an investment
of US\$ **5.95 Billion** (to reduce 70% in Pb, Hg,
Cd, Cr, As by 2015 compared with 2008)



3 ASEMWaterNet Establishment



FINAL
6 November 2012



**Chair's Statement
of the 9th ASEM Summit
5 – 6 November 2012, Vientiane, Lao PDR**

1. The 9th ASEM Summit was held in Vientiane, Lao People's Democratic Republic (Lao PDR) on 5-6 November 2012 and attended by the Heads of State and Government of forty-nine Asian and European countries, the President of the European Council, the President of the European Commission and the Secretary-General of the Association of South East Asian Nations (ASEAN). H.E. Mr. Choummaly SAYASONE, President of the Lao PDR delivered his Opening Address at the Opening Ceremony of the 9th ASEM Summit. The Summit was chaired by H.E. Mr. Thongleng THAMMAVONG, Prime Minister of the Lao PDR.

2. Leaders warmly welcomed new ASEM partners, namely Bangladesh, Norway and Switzerland, who attended ASEM Summit for the first time.

3. Under the overarching theme of the 9th ASEM Summit "Friends for Peace, Partners for Prosperity", Leaders of ASEM partners held a candid and in-depth discussion, exchanged views on important regional and international issues of common interest and concern, reviewed cooperation between Asia and Europe in the three pillars of political, promoting energy access and energy diversification through information and experience exchanges and researches on alternative, new, and renewable energy development, as well as energy efficiency and conservation, and the use of affordable environmentally-friendly technologies, particularly for the developing countries. They recognised the importance of engaging all stakeholders including governments, the private sector and other regional and international institutions to contribute to the enhanced use of renewable and other non-fossil energy resource and technologies.

37. Leaders agreed to reinforce collective efforts to promote sustainable usage and management of water resources, including development and better utilisation of water resources, flood control, flood risk, mapping, water quality and quality monitoring, wetland and water related habitat conservation, urban drinking and waste-water supply planning and managing, integrated river basin management planning, and other trans-boundary water issues, in order to ensure the right to access to safe drinking water and sanitation, full policy coherence and well-functioning water-related ecosystems and in cooperation of water in all its economic social and environmental dimensions in a framework of governance, financing and cooperation. They welcomed the first ASEM Sustainable Development Seminar held in Budapest, Hungary on 21-22 June 2012, which focused mainly on the crucial role of water in sustainable development objectives as an essential ingredient of life, eco-systems, global cycles and economies on sustainable water management in the Danube and Mekong rivers basins and aimed at sharing experiences and best practices on development and better utilisation of water resources. **They also welcomed the establishment of the ASEM Water Resources Research and Development Centre in Hunan, People's Republic of China in 2011.** They further welcomed the outcome of the 4th ASEM Environment Ministers' Meeting held in Ulaanbaatar, Mongolia, on 22-23 May 2012 under the theme "Sustainable Water and Forest Management", which offered an important opportunity to develop ideas and proposals for the UN Conference on Sustainable Development (Rio+20) held in Rio de Janeiro, Brazil, in June 2012.

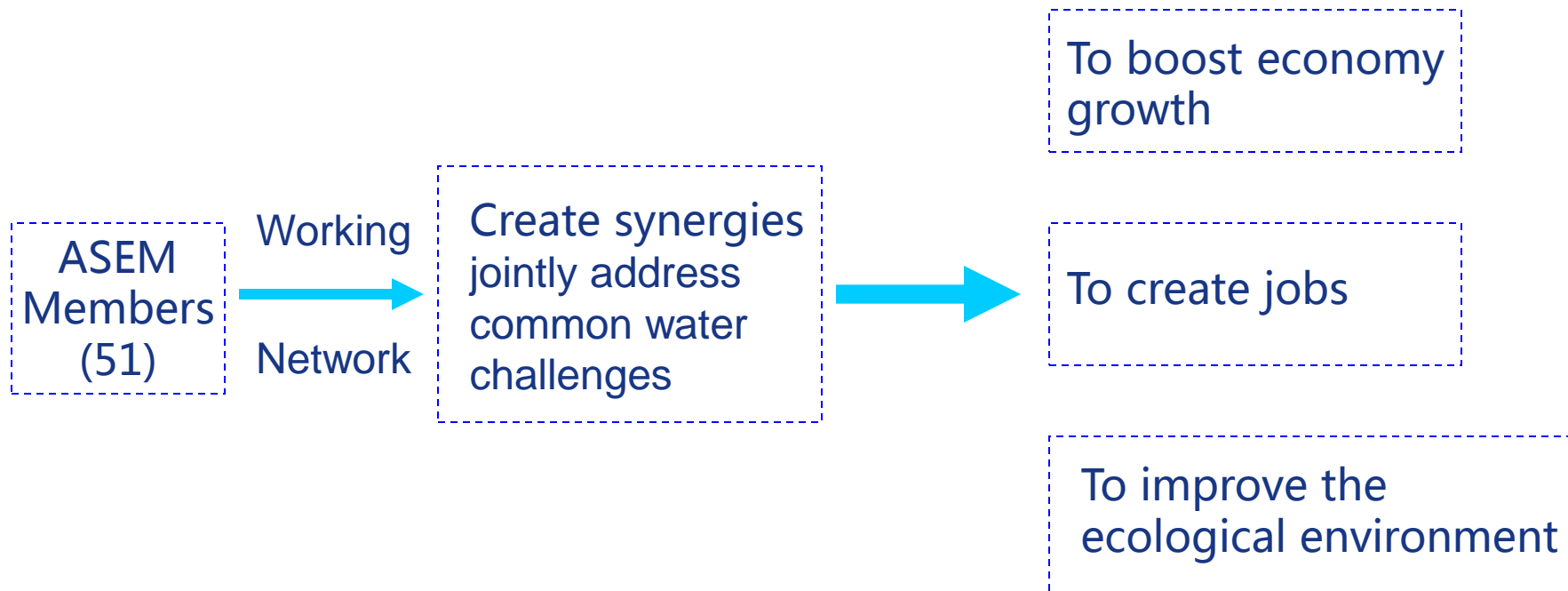
Principles:
Non-profit,
Openness
Neutrality
Mutual benefit
Inclusiveness

Section 3 ASEMWaterNet: Progress Report

1. Mission
2. Vision
3. Values
4. Priority Fields And Main Activities
5. Organization
6. Strategies At Initial Phase
7. What We Have Done

1 Mission

Based on the principle of voluntary participation, ASEMWaterNet

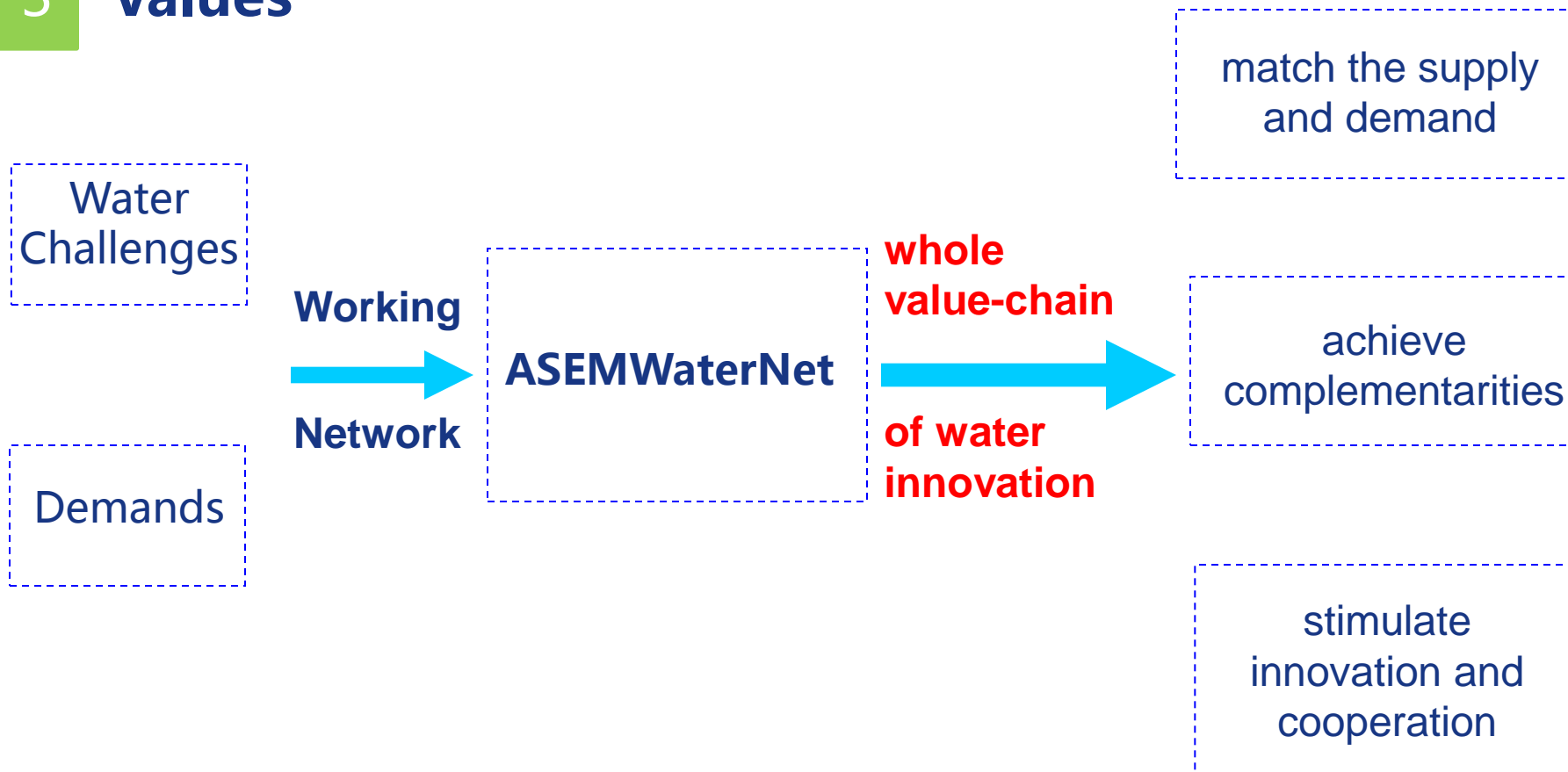


2 Vision

Based on the principle of voluntary participation, ASEMWaterNet

- 💧 To set up an effective working network
- 💧 To strengthen the information sharing and communication
- 💧 To identify the priority areas and themes
- 💧 To promote Integrated Water Resource Management (IWRM)

3 Values



4 Priority fields and Main Activities

Sustainable Water Resources

Water Environment

Water Disasters

Water Ecology

Water Management

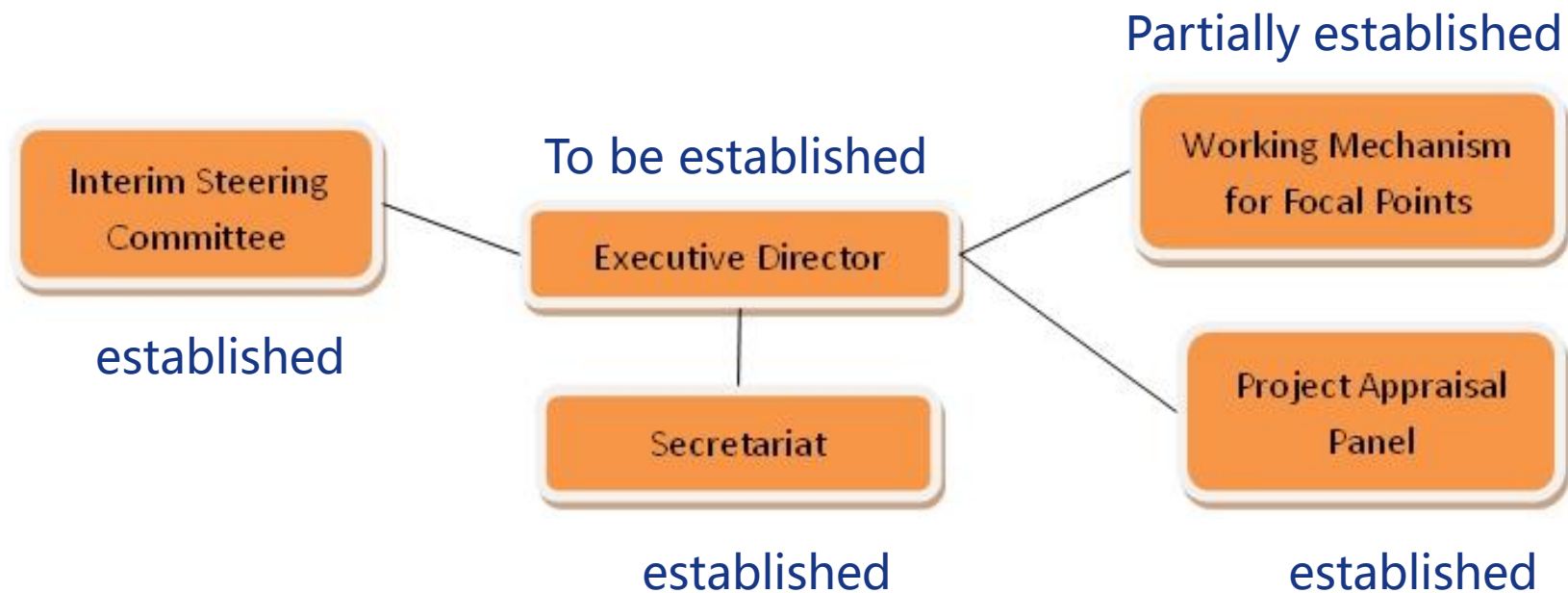
Promote RTD

Promote ITT

Enhance Innovation Capacity

Promote Water Management
Innovation

5 Organization



6 Strategies at initial phase

1. Establish the Working Network

Establish **Strategic Partnership as Observers** with international organizations worldwide

Establish **Partnership as Focal Point** with core members of ASEM at regional, national and local levels

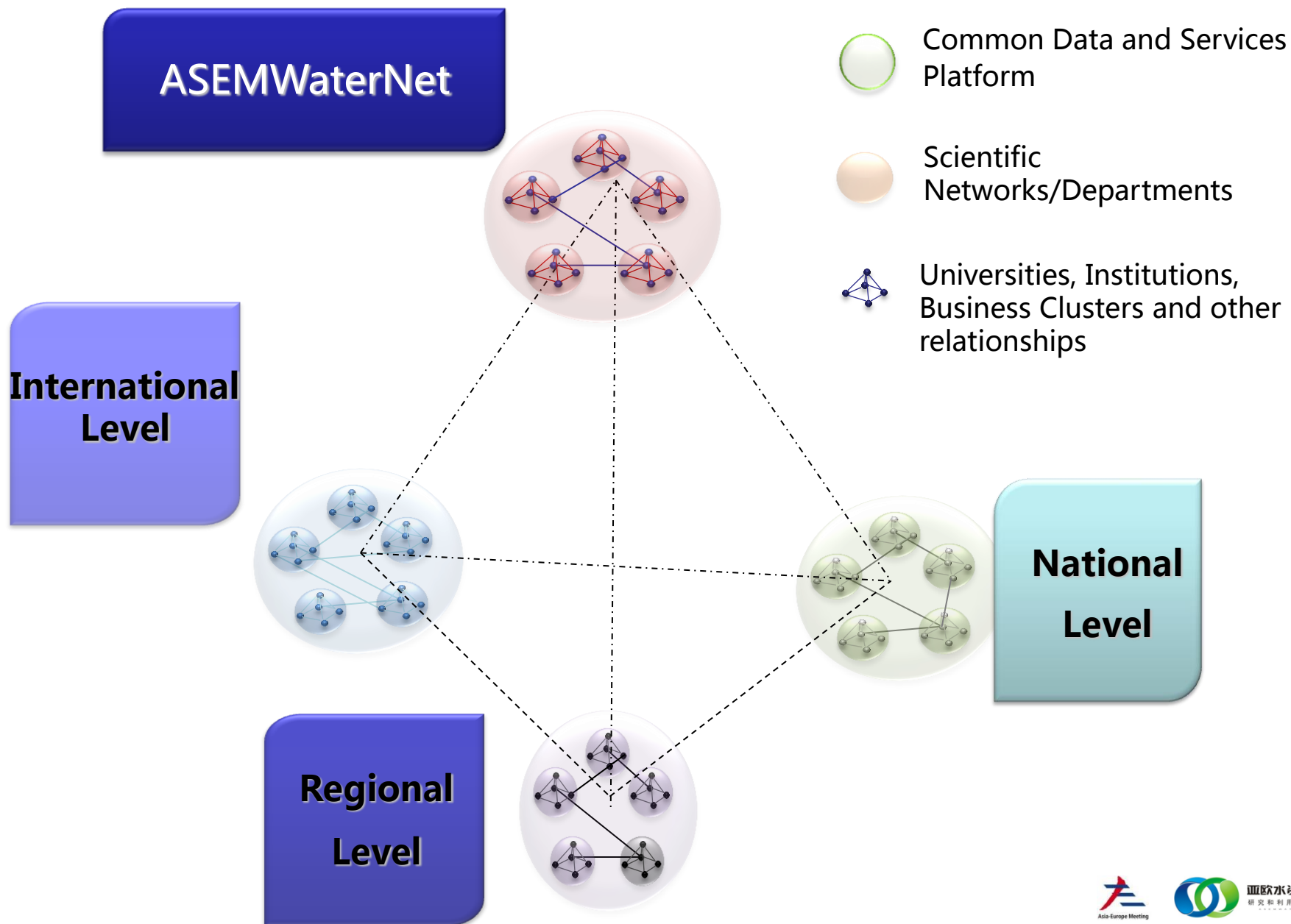
💧 ASEM members ;

💧 non-members;

💧 international organizations and NGOs;

💧 universities, research institutions and industries associations;

💧 enterprises



6 Strategies at initial phase

2. Strengthen Exchanges and Communications

Internal

E-mail

Intranet

Tele, video and phone conferences

Newsletter

Meetings

Website: www.asemwater.org

Reports

External

Website: www.asemwater.org

Newsletter

Social networks

Press conference

Brochures

Workshops/Meetings

6 Strategies at initial phase

3. Set up Four Platforms of Information Share and Services



6 Strategies at initial phase

4. Facilitate Dialogues of Regional Innovation Strategies and Policies

- 💧 To promote dialogues between senior officials
- 💧 To organize innovation strategic research

6 Strategies at initial phase

5. Build Capabilities

- 💧 To provide technological training and assistance
- 💧 To raise awareness and education
- 💧 To link and involve in the important water-related plans

6 Strategies at initial phase

6. Funds

- 💧 To be funded by the Chinese government (salary, equipments fees, website maintenance costs)
- 💧 Volunteering donation and funding from other governments and stakeholders
- 💧 Other channels (Foundations)

7 What We Have Done

Established ASEMWater **Academic and Development Committee** and **Secretariat**

Established partnership with **37** water-related S&T institutions or organizations

Constructed **2** joint wild Observing stations

Established State Joint Research Base on ASEM Water Resources S&T (Authorized by MOST)



7 What We Have Done

Launched Several International cooperation **projects** (Funded by State Plan, FP7, JICA)

Held **International training** courses and International Seminars on ASEM Water resources S&T Cooperation

Submitted **Asia-Europe Water Resources S&T Report(2011-2012)** to ASEM Summit 9

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Section 4 Request and Suggestion

- 1 Invite to be **Strategic Partner** or **Focal Point**
- 2 Co-construction a **Joint Research Lab** or **Joint Engineer Centre**

Section 4 Request and Suggestion

3

Jointly Implement **Projects**

4

Facilitate **Component Technology Transfer** or
Jointly Establish **Pilots** for Watershed, Urban
area, Agriculture, Industry, Degraded Water Zones
and Extreme Hydroclimatic Events



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Creating Partnership for Achieving Water S&T Innovation!

