



# The Millennium Project



The Millennium Project

# ... Acts like a *TransInstitution*



**Created in 1996**  
**Three-Year Feasibility**  
**Study 1992-1995**

# ***70 Nodes...and two regional networks in Europe and Latin America***



*are groups of experts and institutions that connect global and local views in:*



Nodes identify participants, translate questionnaires and reports, and conduct interviews, special research, workshops, symposiums, and advanced training.

# Purposes of the Millennium Project



- Create a global, on-going capacity to improve thinking about the future
- Make that thinking available through a variety of media for consideration in
  - policymaking
  - advanced training
  - educational curricula
  - public education
- Continually respond to feedback, to accumulate wisdom about potential futures

# Some accomplishments



## **System for people to think together about the future**

- 70 Nodes connecting global and local perspectives
- Real-Time Delphi for rapid international assessment and feedback

## **Framework to understand and track global change**

- State of the Future reports
- 15 Global Challenges updated continually online at [www.themmp.org](http://www.themmp.org)

## **Educational contributions**

- Over 300 Interns trained from around the world
- Approximately 1,000 universities use The Millennium Project materials
- Millennium Awards that has involved over a thousand students from around the world

## **Inclusive and participatory system to measure change**

- State of the Future Index (SOFI) – Global and National Indexes

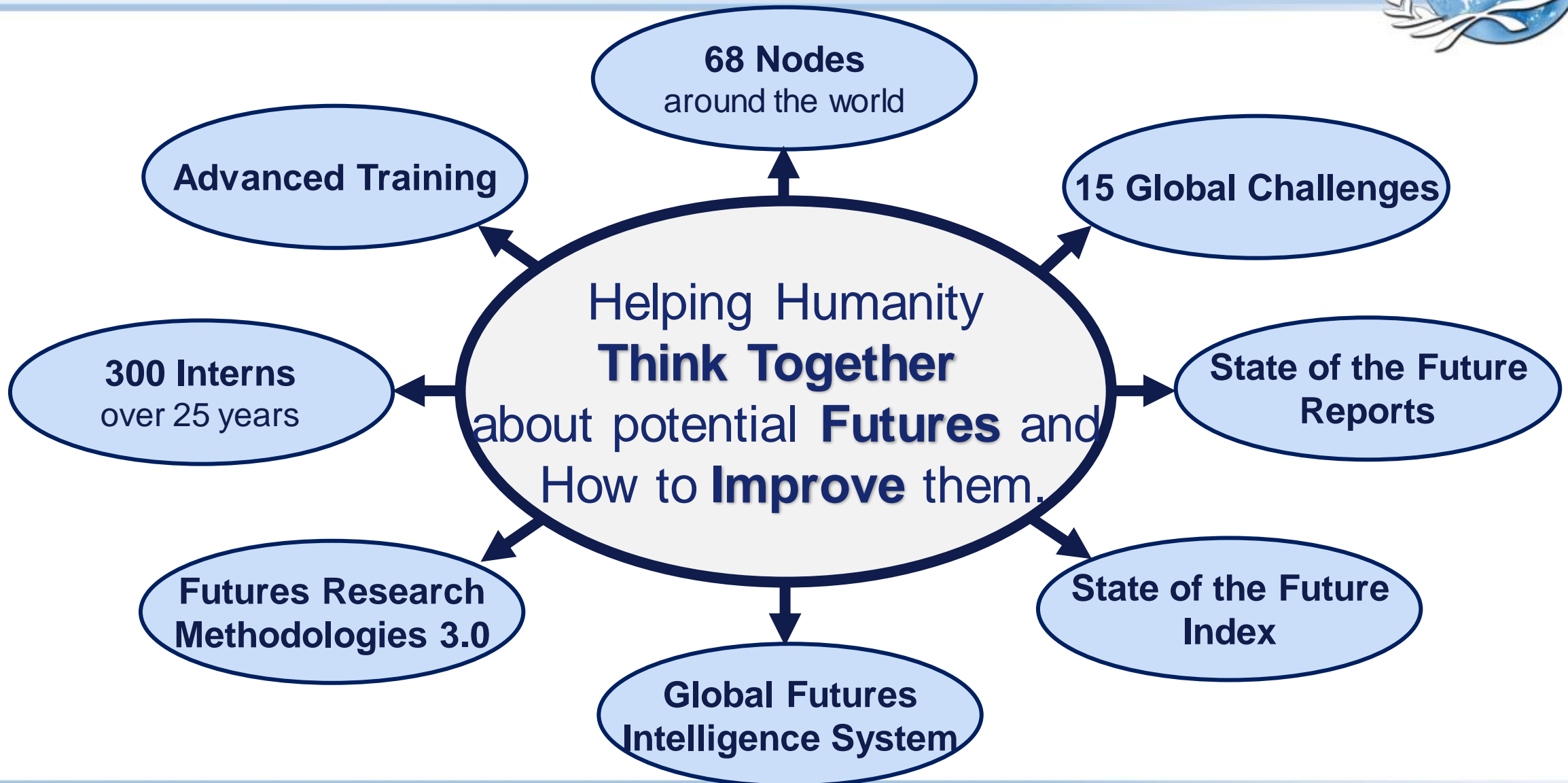
## **Largest collection of internationally peer-reviewed methods to explore the future**

- 37 Methods, 39 Chapters Futures Research Methodology 3.0

## **Global collective intelligence system on the future**

- Bringing it all together in one online platform ... The Global Futures Intelligence System

# How The Millennium Project Achieves its Mission





# Millennium Project Planning Committee

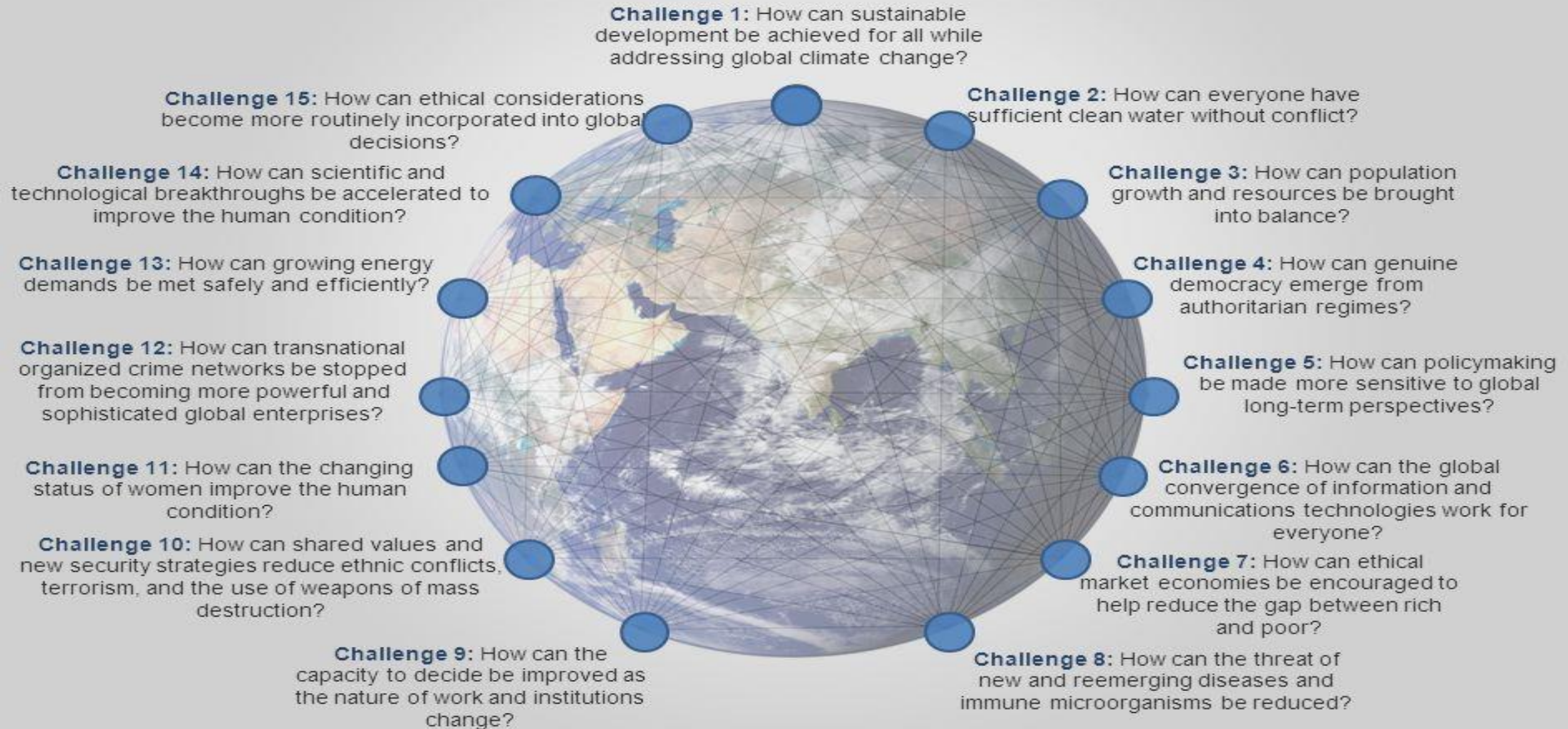


Composed of:

- Board of Directors
- Node Chairs
- Sponsors
- Additional futurists



# 15 Global Challenges—the Agenda Today







The Millennium Project

Global Challenge	Sustainable Development Goals
1. Sustainable Development	           
2. Clean water	   
3. Population and Resources	    
4. Democratization	   
5. Global foresight and decisionmaking	 
6. Global convergence of IT	  
7. Rich-poor gap	   
8. Health issues	   
9. Education and learning	   
10. Peace and conflict	    
11. Status of Women	  
12. Transnational organized crime	   
13. Energy	  
14. Science & technology	   
15. Global ethics	     

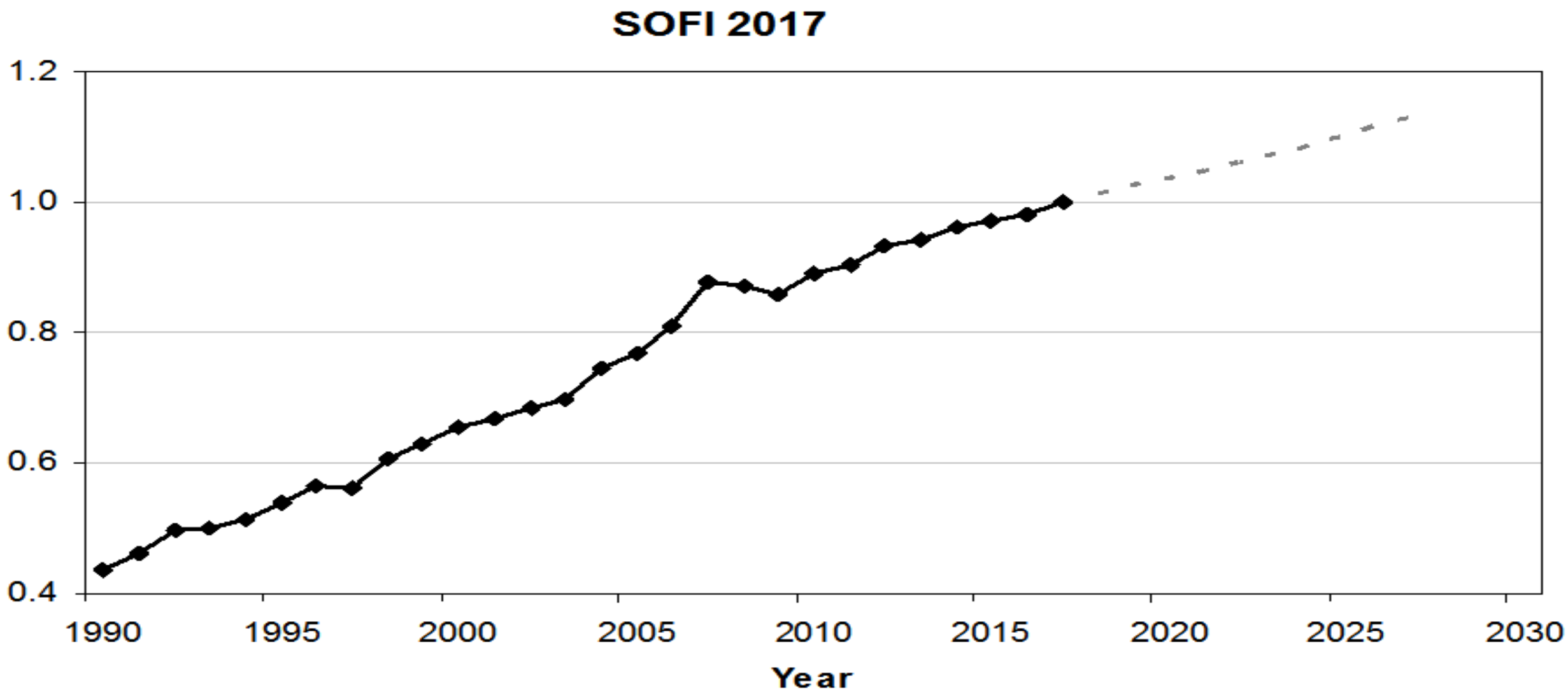


# General Conceptual Example: MP Early Warning System for PMO Kuwait

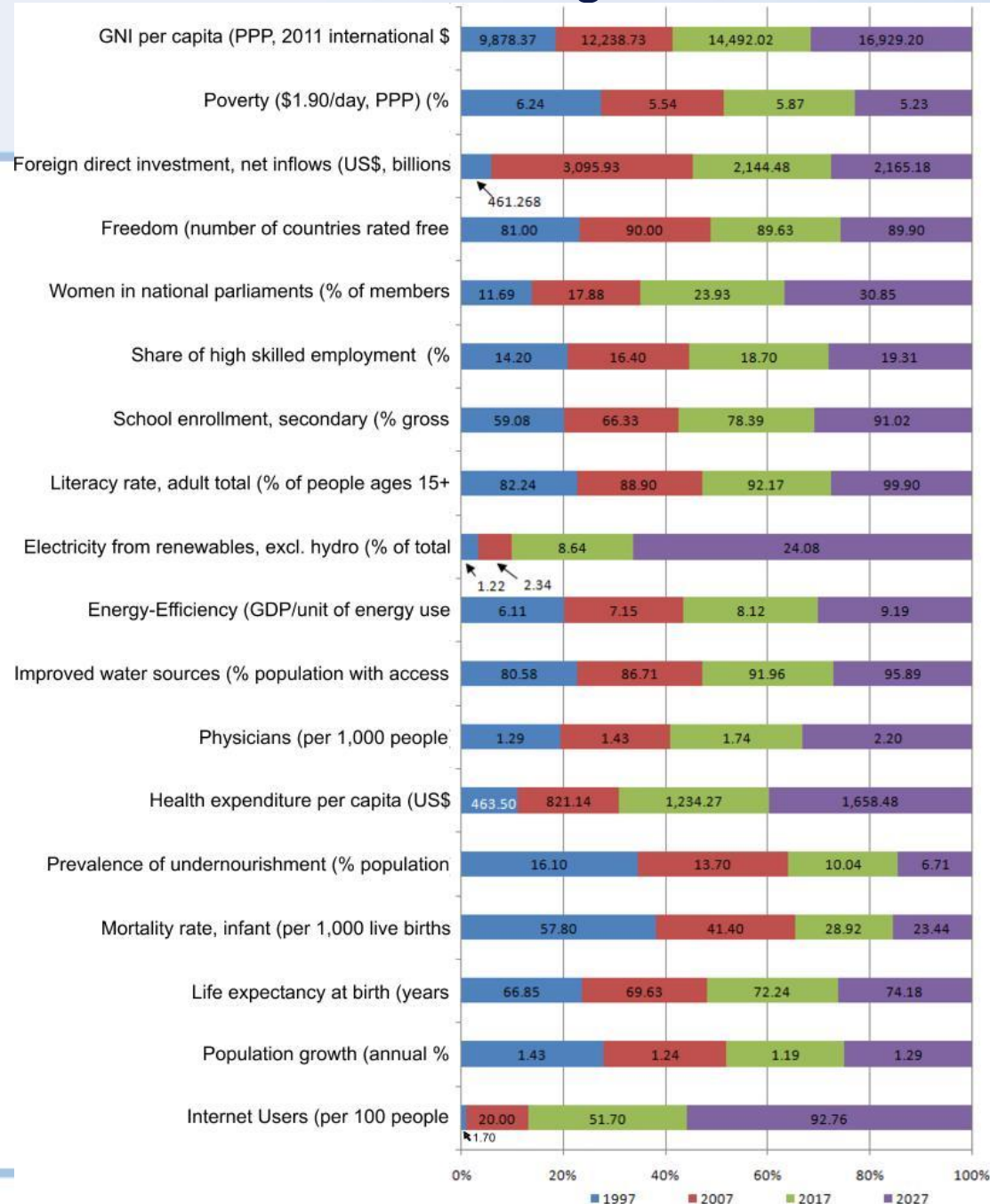




# Chapter 2 State of the Future Index



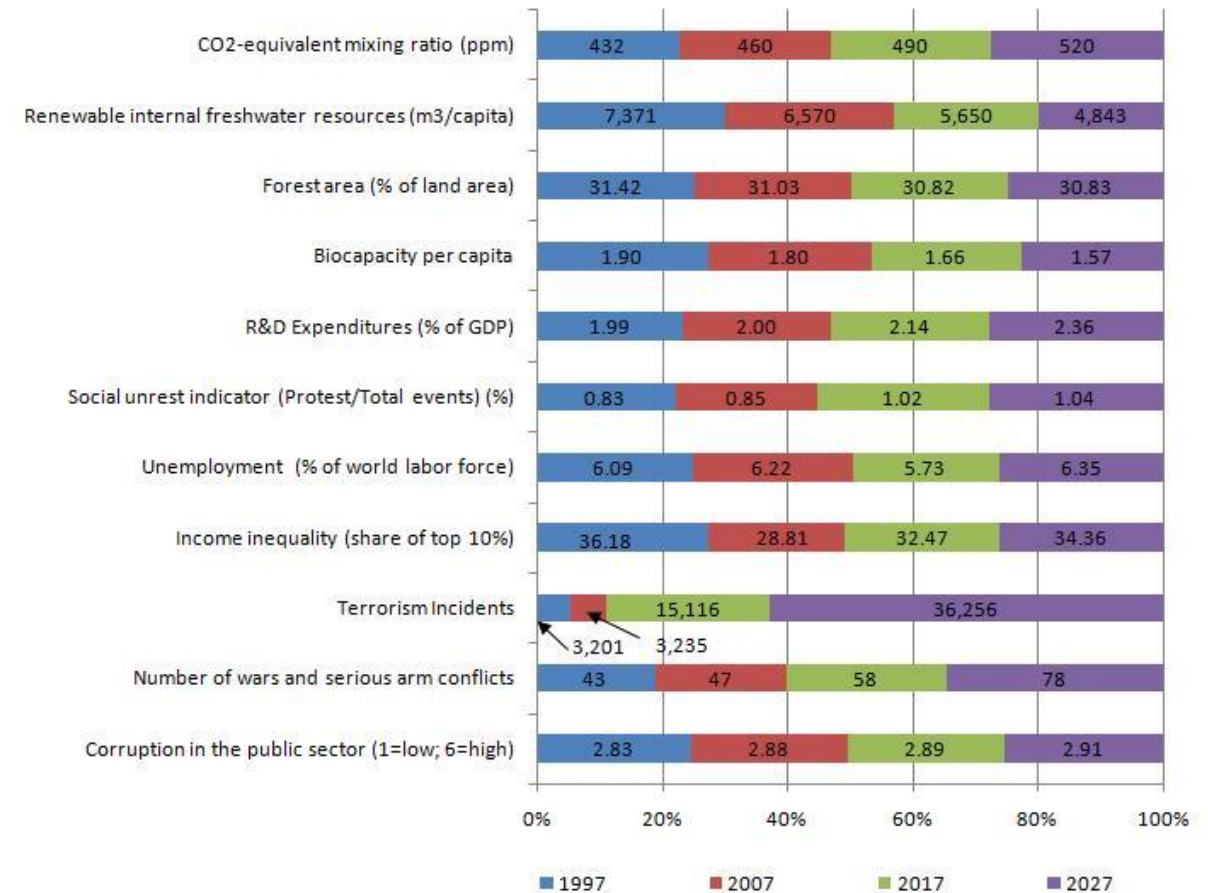
## Where we are winning



# Report Card



## Where we are losing or there is no progress



# STATE OF THE FUTURE

19.1



Jerome C. Glenn, Elizabeth Florescu,  
and The Millennium Project Team



**Preface**

**Executive Summary**

**Ch 1 Global Challenges**

**Ch 2 2017 State of the Future Index**

**Ch 3 Future Terrorism & Deterrence**

**Ch 4 Work/Tech 2050 Scenarios**

**and Workshop Strategies**

**Ch 5 Conclusions**

**Appendix**



# MP Futures Research... so far



1. African Futures Scenarios 2025, and UNDP workshop at the UN (1994)
2. Millennium Project Feasibility Study final report (1995)
3. Global Issues/Strategies four-round Global Lookout (Delphi) study (1996)
4. Lessons of History (1997)
5. Global Opportunities and Strategies Delphi (1997)
6. Definitions of Environmental Security (1997)
7. Futures Research in Decisionmaking (and checklist) (1998-99)
8. Global Normative 2050 Scenario (1998)
9. Environmental Security Threats and Policy Leadership (1998)
10. Current/Potential UN military doctrine on Environmental Security (1999)
11. Six Alternative Year 3000 Scenarios (1999)
12. S&T Issues over the next 25 years (2000)
13. Future Technological Implications for Society and the UN System (2000)
14. Analysis of UN Summit Speeches (2001)
15. Military environmental crimes and the role of the ICC (2001)
16. Management Implications of Future S&T 2025 Issues (2001)
17. New Military Environmental Security Requirements 2010-2015 (2001)
18. Global Goals for the year 2050 (2002)
19. Future S&T Scenarios 2025 (2002)
20. Emerging Environmental Security Issues for Future UN Treaties (2002)
21. Monthly Reports: Emerging Environmental Security Issues (2002-2011)
22. Middle East Peace Scenarios (2002-04)
23. Early Warning System for Kuwait Oil Company (2003-04)
24. Nanotech Military R&D Health/Env Research Prevention Priorities 2004-05)
25. Future Ethical Issues (2004-05)
26. Global Energy Scenarios (2006-07)
27. South Korea SOFI (2006)
28. Future of Learning and Education 2030 (2007)
29. Global Climate Change Situation Room for Gimcheon, South Korea (2007-2008)
30. Conceptual design for global energy collective intelligence (GENIS) (2008)
31. Status of Government Future Strategy Units (2008)
32. RTDelphi for UNESCO World Water Report (2008)
33. WFUNA Human Rights (2008)
34. Decision Criteria Evaluation of Global Environment Facility (2008)
35. South Korea SOFI and South African SOFI (2008)
36. Early Warning System PMO Kuwait (2008-2009)
37. Potential Future Elements of the Next Economic System (2009)
38. UNESCO World Water Scenarios project (2009)
39. Future of Ontologists (2009)
40. Future Hopes and Fears: a Kuwait Perspective (2010-2011)
41. Latin America 2030 Scenarios (2009-2011)
42. Egypt 2020 (2010)
43. Changes to Gender Stereotypes (2011)
44. Azerbaijan SOFI (2011)
45. Future Arts, Media, and Entertainment: Seeds for 2020 (2011)
46. Cooperatives 2030: Factors Impacting Future of Cooperatives and Business (2012)
47. Egypt's national Synergetic Information System (ECISIS) (2013-16)
48. Hidden Hunger: Unhealthy Food Markets in the Developing World (2013)
49. Vulnerable Natural Infrastructure in Urban Coastal Zones (2013)
50. FUTURES Dictionary/Encyclopedia (English and Spanish) (2014)
51. SIMAD and Lone Wolf Terrorism Counter Strategies (2014)
52. Czech Rep., Hungary, Poland, Slovakia, Visegrad Region SOFIs (2014-2015)
53. Water-Energy-Food Nexus in the Context of Climate Change (2015-16)
54. Pre-Detection of Terrorism Strategies RTDelphi, NATO Workshop (2015-17)
55. Future Work/Technology 2050 Global Issues, Scenarios, Workshops (2015-17)
56. US COVID Scenarios (2020); Global Developments RTDelphi (2021)



# ***A Three-Year Global Study***

## ***on what to do about Potential Futures for Work and Technology***

**Jerome C. Glenn, CEO  
The Millennium Project**

WORK/TECHNOLOGY

**2050**

SCENARIOS AND ACTIONS

JEROME C. GLENN AND THE MILLENNIUM PROJECT TEAM

# Future Work/Technology 2050 Study



1. Literature and Related Research Review
2. Real-Time Delphi on questions not asked or poorly answered
3. Three Global Scenario Drafts to 2050
4. Three Separate RTDelphi's for Feedback on each Scenario
5. Final Scenarios, given for Millennium Project Nodes
6. National Workshops to Explore Long-range Strategies
7. Collect suggestions from the national planning workshops, distilled in to 93 actions, assess all via five (5) Real-Time Delphi's
8. Final Report for Public Discussion





**The Millennium Project**

# **Futures Research Methodology**

**Editors Jerome C. Glenn and Theodore J. Gordon**  
**With support from the Rockefeller Foundation**

**Version 3.0**



**39 Chapters**  
**37 Different Methods**

**1,300 pages**

**Largest collection of  
Internationally peer-  
reviewed methods to  
explore the future  
ever assembled in  
one source**

- 
- |   |   |   |
|---|---|---|
| 1. Introduction to Futures Research Methodology | 14. Substitution Analysis                     | 27. Using Vision in Futures   |
| 2. Environmental Scanning                       | 15. Statistical Modeling                      | 28. Normative Forecasting   |
| 3. Text Mining for Technology Foresight         | 16. Technology Sequence Analysis              | 29. S&T Road Mapping  |
| 4. The Delphi Method                            | 17. Morphological Analysis                    | 30. Field Anomaly Relaxation  |
| 5. Real-Time Delphi                             | 18. Relevance Trees                           | 31. Agent Modeling  |
| 6. The Futures Wheel                            | 19. Scenarios                                 | 32. Chaos and Non-Linear Dynamics                                       |
| 7. The Futures Polygon                          | 20. A Toolbox for Scenario Planning           | 33. Multiple Perspective Concept  |
| 8. Trend Impact Analysis                        | 21. Interactive Scenarios                     | 34. Heuristics Modeling   |
| 9. Cross-Impact Analysis                        | 22. Robust Decisionmaking                     | 35. Causal Layered Analysis   |
| 10. Wild Cards                                  | 23. Participatory Methods                     | 36. Personal Futures  |
| 11. Structural Analysis                         | 24. Simulation and Games                      | 37. State of the Future Index   |
| 12. The Systems Perspectives                    | 25. Genius Forecasting, Intuition, and Vision | 38. SOFI Software System  |
| 13. Decision Modeling                           | 26. Prediction Markets                        | 39. Integration, Comparisons, and Frontiers of Futures Research Methods |

ISBN-978-0-9818941-1-9



# Global Futures Intelligence System

## www.themp.org



The Millennium Project - Global Futures System

Select Language ▼

### Account

Enter your email to login:

Login

Intro Tour

State Of The Future

Subscribe

### Sections of GFS

Full System

15 Global Challenges

Select an Option ▼

Research

Select an Option ▼

Futures Methodologies

Select an Option ▼

Home

FAQs

Participate

About

Interact

Updates

## The Millennium Project

A global foresight network of nodes, information, and software.

Functioning as a think tank on behalf of humanity, not on behalf of a government, an issue, or an ideology.

Created to improve humanity's prospects for building a better future.



# Menu for each Challenge



1. **Situation Chart:** Current Situation; Desired Situation; and Policies
2. **Report** (detailed text)
3. **News items** (automatic news feeds – searchable)
4. **Scanning** (annotated, rated information)
5. **On-going Real-Time Delphi** questionnaires to collect expert judgments
6. **Public comments**
7. **Discussion groups**
8. **Computer models** (mathematical and rules-based), and conceptual models
9. **Resources:** websites, books, papers, videos
10. **Updates** – all edits
11. **Digests** – Recent scans, edits, discussions



# Menu Options for each Challenge in GFIS



[Hangouts](#) [Alerts](#) [Messages](#) [Account](#)

The Millennium Project - Global Futures System

Select Language

## Account

[Logout](#)

[Intro Tour](#)

[State Of The Future](#)

## Sections of GFS

[Full System](#)

[15 Global Challenges](#)

Challenge 1: Sustainable ...

[Research](#)

Select an Option

[Futures Methodologies](#)

Select an Option

## Criteria

Enter keyword to search [Clear](#)

Source: [Reviewers](#)

## Results

**Challenge 1: Sustainable Development and Climate Change Reviewers**

[All](#)

[Report](#)

## Challenge 1: Sustainable Develop...

How can sustainable development be achieved for all while addressing global climate change?

[Situation](#) **[Report](#)** [Digest](#) [Edits](#) [Scanning](#) [News](#) [Comments](#) [Models](#) [Resources](#) [Books](#) [Papers](#) [Questions](#) [Data](#)

[Short Overview](#) **Free!**

[General Description](#)

[Green Economy](#)

[Climate Change](#)

[Food Security](#)

[Biodiversity](#)

[Forests](#)

[Ozone](#)

[POPs, Pollution and Waste](#)

[Population](#)

[Miscellaneous](#)

[Regional Considerations](#)

[Africa](#)

[Asia and Oceania](#)

[Middle East and North Africa](#)

[Europe](#)

[Latin America](#)

[North America](#)

[Suggested Actions To Address This Challenge](#)

[Additional Actions](#)

[Additional Contributions](#)

[We need sustainable prosperity, not endless growth](#)

[Climate Change and production of Hydrogen Sulphide H2S and mass extinctions](#)

[Comments From Participants](#)

[Indicators](#)

[Useful Websites](#)

View Edits: [None](#)

## Challenge 1: Sustainable Development and Climate Change

How can sustainable development be achieved for all while addressing global climate change?

### Situation

[Report](#)[Digest](#)[RTDelphi](#)[Updates](#)[Scanning](#)[News](#)[Discussions](#)[Comments](#)[Models](#)[Resources](#)

### Current Situation

[Atmospheric CO2 400 ppm](#)[Greenhouse Gas Emissions](#)[Country Emission Pledges](#)[Ocean Acidity 30% Increase since Industrial Revolution](#)[Fossil Fuel Subsidies](#)[Arctic Ice Levels](#)[Global Temperature](#)[Current Forecasts](#)

### Desired Situation

[Reduction in Atmospheric Carbon Dioxide Levels](#)[Adherence to pledged reduction targets](#)[Change in Perception](#)

### Policies To Address The Gap

[US-China 10-year Goal with NASA-like program to achieve it](#)[Carbon Tax](#)[Cap and Trade](#)[Communication by the media](#)[Equal Rights for Women Worldwide](#)[Green Growth Technologies To Address The Gap](#)[Adaptation To Address The Forecasts](#)

# Check list: Connecting Futures Research to Policy and Strategic Decisionmaking



1. Make sure leaders know what futures research is and is not
2. Include decision makers in the process, connect to strategic planning
3. Include workshops and training for decisionmakers
4. Include interest groups and actors
5. If goals are lacking, include as an issue
6. Determine who has responsibility to act
7. Balance long-term and short-term views
8. Use at least one formal method that all understand
9. Provide information that demonstrates a crisis
10. Include knowledge about what is possible
11. Make options clear; connect to goals and strategies
12. Demonstrate feasibility of recommendations
13. Include subjective descriptions of alternative futures

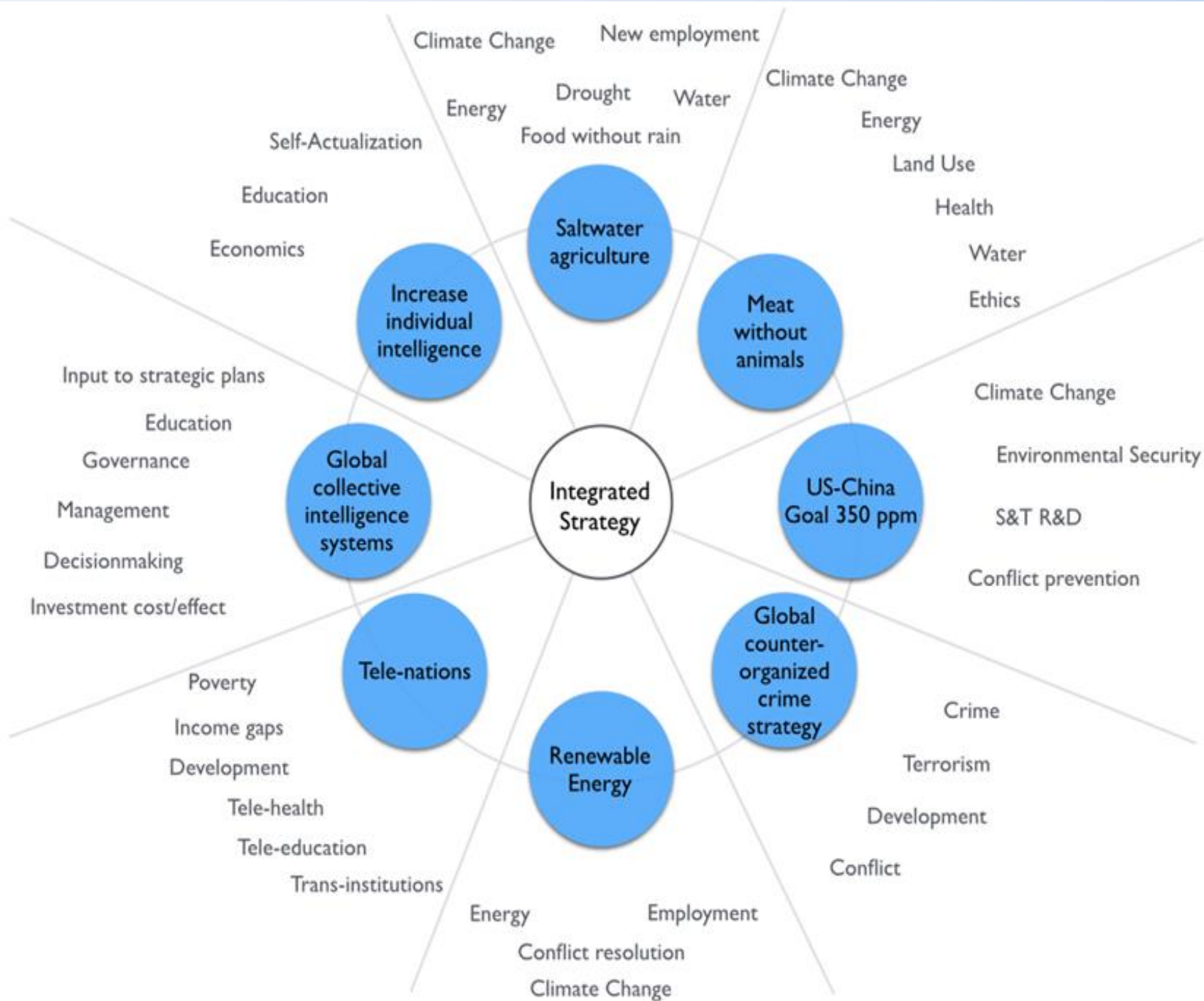
# Check List: Connecting Futures Research

(continued)



14. Connect costs to benefits
15. Suggest ways of making decisions in uncertainty
16. Include intended actions of others
17. Develop indicators
18. Use testimony of eminent scientists
19. Project effects of action or non action in scenarios
20. Show technical feasibility to overcome fear of failure
21. Use computer models
22. Link to similar activities
23. Avoid information overload
24. Allow time for individuals to integrate concepts
25. Include media
26. Make work integrative and cumulative





Drawn from the actions suggested to address the 15 Global Challenges, these 8 High Impact Strategies will affect several Challenges each, making for an integrated global strategy

# Current and Previous Sponsors/Clients:



- Academy of Scientific Research and Technology, Egypt (2013-2015)
- AGAHI Pakistan (2016-18)
- Alan F. Kay & Hazel Henderson Foundation (1996–2000)
- Amana Institute, São Paulo, Brazil (2004)
- Applied Materials, Santa Clara, California (2002–09)
- Argentina Ministry of Agriculture (2012)
- Azerbaijan State Economic University (2009-2016)
- City of Gimcheon (via UN Future Forum, So. Korea) (2009–10)
- Deloitte & Touche LLP, Cleveland, Ohio (1998–09)
- The Diwan of His Highness the Amir of Kuwait (2010–11)
- Environmental Law Institute (2017)
- EY (Ernst & Young) (2021)
- Ford Motor Company (1996–97, 2005–06)
- Foundation for the Future, Bellevue, Washington (1997–98, 1999–2000, 2007–08)
- General Motors, Warren, Michigan (1998–2003)
- Government of the Rep. of Korea (via UN Future Forum) (2007–08)
- The Hershey Company (2008–09)
- Hughes Space and Communications, (1997–98, 2000)
- Kuwait Oil Company (via Dar Almashora (2003–04 )
- Kuwait Petroleum Corp. (via Dar Almashora for Consulting) (2005–06)
- Ministry of Communications, Rep. of Azerbaijan (2007–11)
- Ministry of Educ. and Presidential Commission on Education, Republic of Korea (2007)
- Monsanto Company, St. Louis, Missouri (1996–98)
- Montenegro Ministry of Science and Technology (2012)
- Motorola Corporation, Schaumburg, Illinois (1997)
- NATO, Brussels, Belgium (2016)
- Pioneer Hi-Bred International, West Des Moines, Iowa (1997)
- Rockefeller Foundation (2008–11; 2013)
- Shell International (Royal Dutch Shell Petroleum Company), London, UK (1997)
- UNESCO, Paris, France (1995, 2008–10)
- United Nations Development Programme, New York, (1993–94)
- United Nations University, Tokyo, Japan (1992–95, 1999–2000)
- Universiti Sains Malaysia (2011)
- U.S. Army Environmental Policy Institute, Arlington, Virginia (1996–2011)
- U.S. Department of Energy, Washington, D.C. (2000–03)
- U.S. Environmental Protection Agency, Wash., D.C. (1992–93, 1996–97)
- U.S. Department of Defense, Off of the Secretary
- Woodrow Wilson International Center for Scholars (Foresight and Governance) (2002)
- World Bank (World Perspectives 2008 and GEF Evaluation Office 2012)
- **In-kind Sponsors:**
- Google
- George Washington University
- Harvard University
- Organization of American States (OAS)
- The Smithsonian Institution
- World Academy of Art and Science
- UNESCO
- UN Office of the Secretary-General

# Current and Next Activities



- Real-Time Delphi on Global Developments for input the global report of EY (Ernst & Young) and for input to the next ***State of the Future*** report by The Millennium Project
- Real-Time Delphi on ***2030 State of the Future Index***
- Real-Time Delphi on ***Our Common Future*** with the Office of the UN Secretary General.
- Assessment of Global Governance Systems for the Transition to Artificial General Intelligence
- Next ***State of the Future*** report
- World Future Day March 1<sup>st</sup> 2022



# For further information



**Info@Millennium-Project.org**

The following resources are available at:  
<http://www.millennium-project.org>

- ***Work/Technology 2050: Scenarios and Actions***
- ***State of the Future 19.1***
- ***Futures Research Methodology 3.0***
- ***Global Futures Intelligence System***