

NACWA 2012

July 17, 2012

*Forecasting the Future:*  
**Strategic  
Imperatives for  
Utilities**

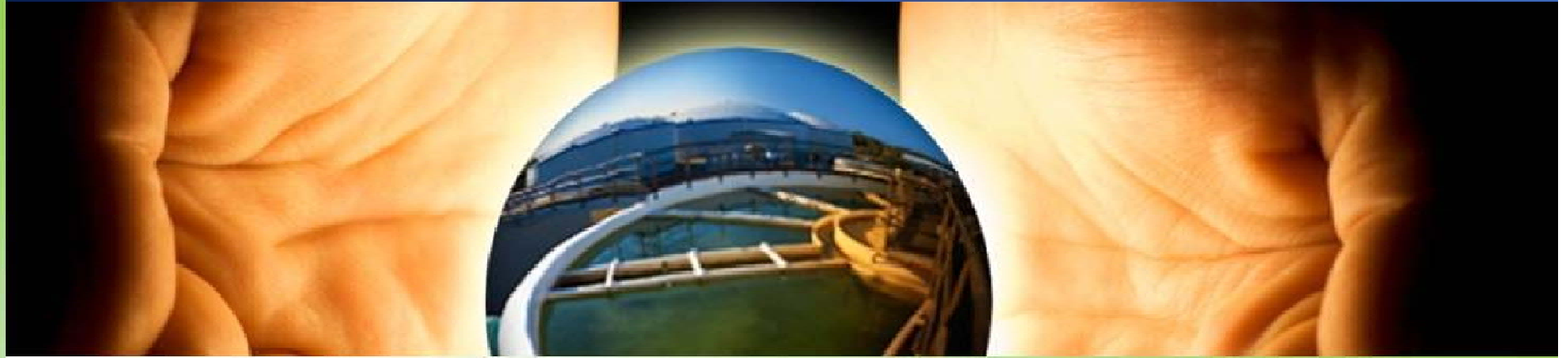
Terry Brueck,  
President/CEO





# ***Agenda***

1. Research Results To Improve Your Strategies
2. How Strategic Is Your Utility?
3. Using the Strategic Imperatives
4. Conclusion



# *SECTION 1*

*Research Results To Improve Your Strategies*

# *Research Results:* *Forecasting The Future For Water Sector* *WaterRF Project #4232*

- Identified Trends & Impacts
  - White Papers
  - Key Trends to watch
- Developed “Conceptual Blueprint”
  - Vision of Desired Future
  - Strategic Imperatives
- Developed Tools for Utility – Specific Strategies
  - Strategic Planning Methodology
  - Scenario – Based Analysis





# *Utility Participation Was Extensive*

## *North American Utilities:*

Akron Public Utilities Bureau, OH  
Anchorage Water and Wastewater Utility, AK  
Anne Arundel Department of Public Works, MD  
Arlington Water Utilities, TX  
Atlanta Department of Watershed Management, GA  
Beaufort-Jasper Water and Sewer Authority, SC  
Columbus Public Utilities, OH  
Columbus Water Works, GA  
El Paso Water Utilities, TX  
EPCOR, Edmonton, Canada  
Greater Cincinnati Water Works, OH  
JEA, FL  
Las Vegas Valley Water District, NV  
Louisville Water Company, KY  
Massachusetts Water Resources Authority, MA  
Metropolitan Water District Southern California, CA  
Salt Lake City Public Utilities, UT  
San Diego Water, CA  
Toho Water Authority, FL  
Tualatin Valley Water District, OR

## *International Utilities*

(Coordinated by IWA)  
Agbar Water, Spain  
Anglian Water, United Kingdom  
Ruhrverband, Germany  
Tekniska Verken, Sweden  
Water Corporation, Western Australia  
Waternet, The Netherlands  
PUB Singapore

# *“Futures” Workshop Participants Validated Trends and Expanded Strategies*



Organization	Workshop Attendee
Atlanta Dept of Watershed Mgmt	Robert Hunter
EPCOR Water Services	Audrey Cudrak
Greater Cincinnati Water Works	Dave Rager
Louisville Water Company	Ed Chestnut
Toho Water	Brian Wheeler
Tualatin Valley Water District	Greg DiLoreto
Metropolitan Water District of Southern California	Roy Wolfe
Passaic Valley Water Commission <i>(PAC Member)</i>	Laura Cummings
Southern Nevada Water Authority	Rick Holmes
Washoe County <i>(PAC Member)</i>	Rosemary Menard
Water Research Foundation <i>(Project Manager)</i>	Linda Reekie
Water Research Foundation	Rob Renner

Organization	Workshop Attendee
Ruhrverband - Germany	Norbert Jardin
Tekniska Verken - Sweden	Magnus Arnell
World Resources Institute	Cy Jones
Morgan Keegan	Harold Gorman
EMA, Inc.	Terry Brueck
EMA, Inc.	Denise O'Berry
EMA, Inc.	Dianne Kruse





# ***“White Papers” Identified New and Changing Trends in Four Categories***

- Environmental
  - Energy Demand
  - Climate Change
  - Natural Disasters
  - Total Water Management
- Technological
  - Rate of Technological Changes
  - Information Technology
  - Water System Technology
  - Water Treatment Technology
- Economic/Business
  - Economic
  - Financial
  - Organizational
  - Managerial
- Societal/Political
  - Governance
  - Water-Related Regulation
  - Water-Related Legislation
  - Organizational Sustainability
  - Customer/Constituent and Community Relationships
  - Mass Media Management

White Papers are available on WaterRF website  
(search for project number 4232):

[http://www.waterrf.org/Research/SpecialReports/  
Lists/SpecialReports/](http://www.waterrf.org/Research/SpecialReports/Lists/SpecialReports/)

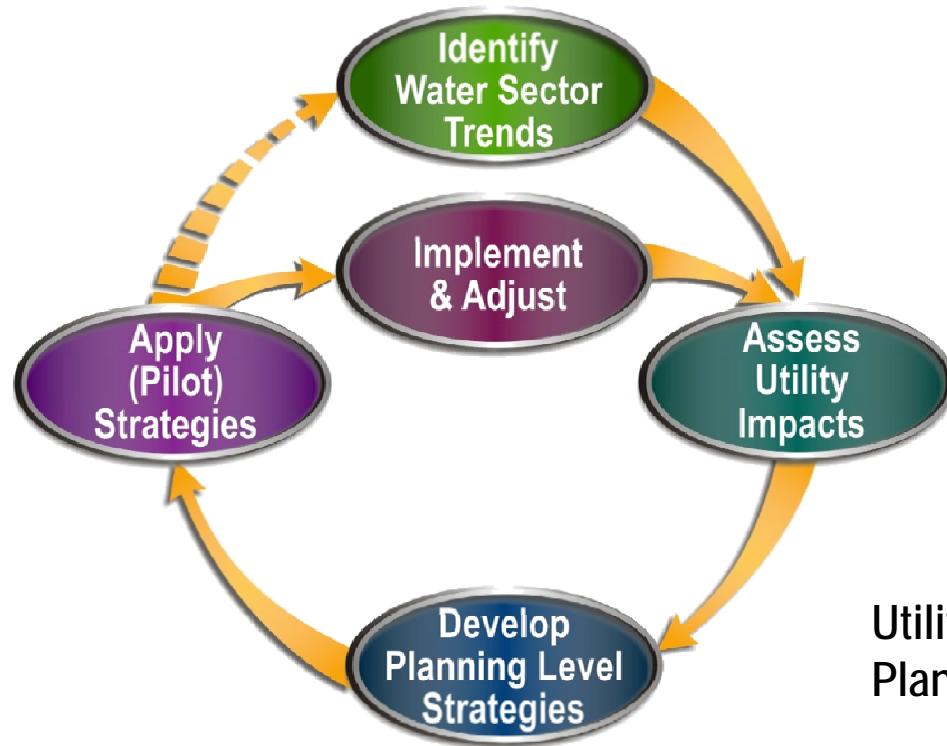


## *Key Trends to Watch - Consolidated*

1. Uncertain Economy, Financial Instability
2. Decreased Availability/Adequacy of Water Resources
3. Aging Water Infrastructure/Capital Needs
4. Shifting Water Demands
5. Changing Workforce, Dynamic Talent Life-Cycle
6. Expanding Application of Technology
7. Customer/Stakeholder Engagement, Media Influence
8. Increasing/Expanding Regulations
9. Efficiency Drivers, Resource Optimization
10. Climate Uncertainty

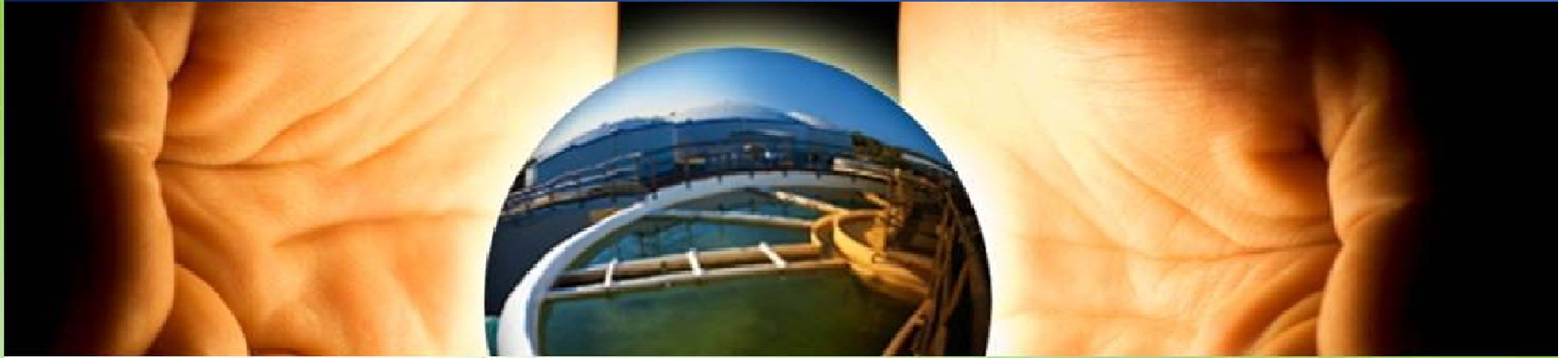


# *"Forecasting The Future" – Using The Results*



## Water Sector Call-To-Action

- Vision of Desired Future
- Strategic Imperatives



# *SECTION 2*

*How Strategic Is Your Utility ?*

- Strategic Imperatives*
- Rating Your Utility*



# *Strategic Imperatives*

- Strategic Imperatives Are Based on Strategies That Apply to Many Trends
- Strategic Imperatives Are the Water Sector's "Must Do" List (Seven Broad Imperatives)
- Strategic Imperatives Require Significant Changes For Many Utilities



## *Strategy is About Making Changes*

“It is not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change”

- Charles Darwin -

- Charles Darwin -

[illegible]

# Strategic Imperatives



## *A Utility's "Must Do" Change List: Seven Strategic Imperatives*

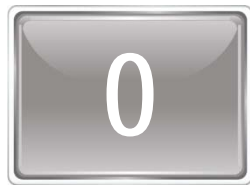
- #1: Communication: Multi-Faceted Engagement
- #2: Collaboration/Partnerships
- #3: Total Systems View
- #4: Rate-Making/Financing
- #5: Applied Information and Control Technology
- #6: 21<sup>st</sup> Century Leadership Skills
- #7: Adaptive Planning and Implementation



# *Rate Your Utility: How Strategic Are You?*

## **IMPERATIVE #1** Communication: Multi-Faceted Engagement

We build trust in environmental, social, corporate, and regulatory areas by engagement with diverse key stakeholders.



Little or  
None



Some



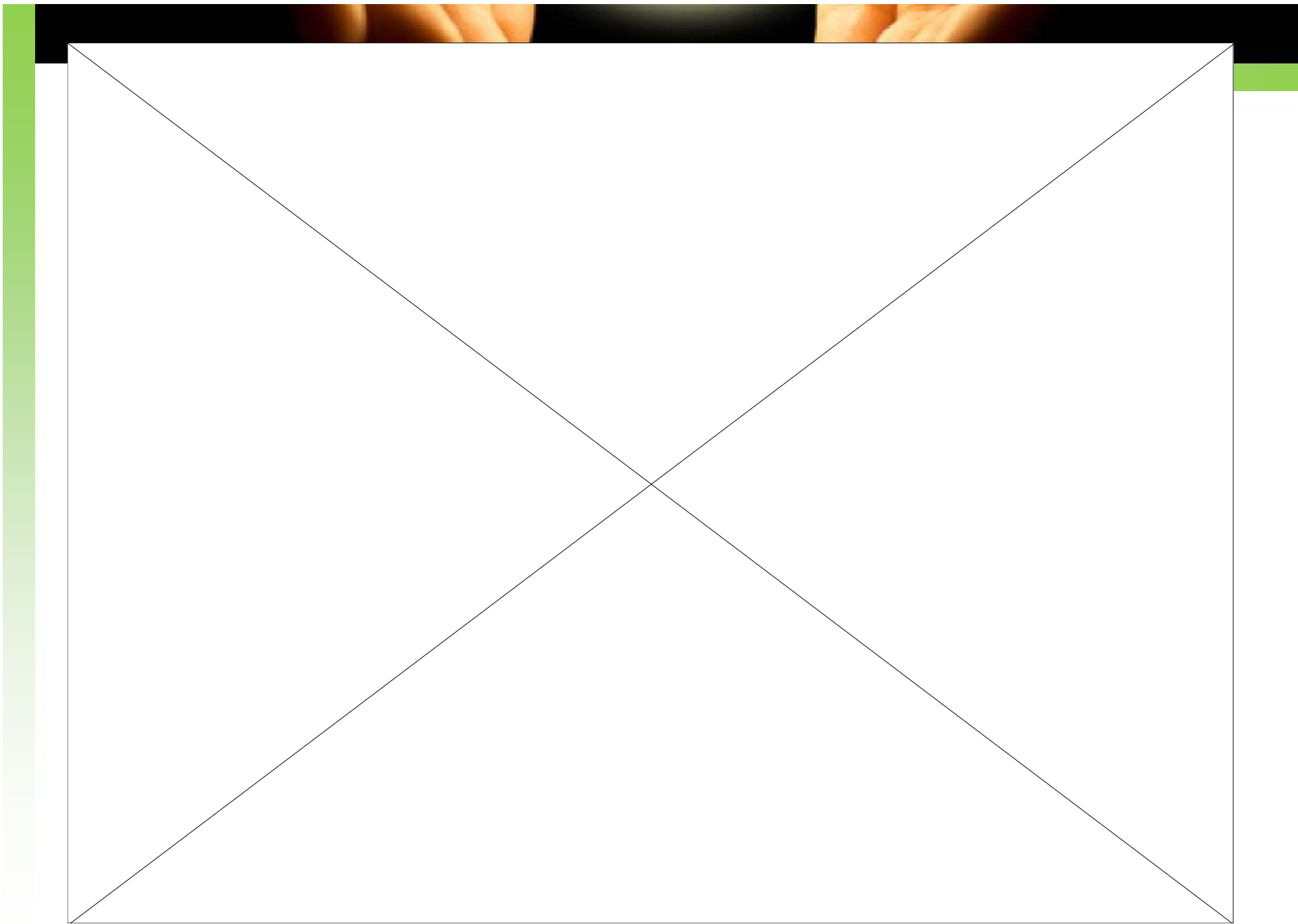
A Lot



Fully

### **EXAMPLE:** to Score “Fully” = 3 Points

- We proactively engage with key advocate and adversary groups
- We address environmental, social, financial, and regulatory areas
- We use many ways to create engagement (outreach meetings, social media, public messages, stakeholder presentations/dialog, etc.)



# *Rate Your Utility: How Strategic Are You?*

## **IMPERATIVE #2** Collaboration/Partnerships

We consider alternative models in the provision of various water services such as private-sector participation, public organization partnerships, and regional collaborations.



Little or  
None



Some



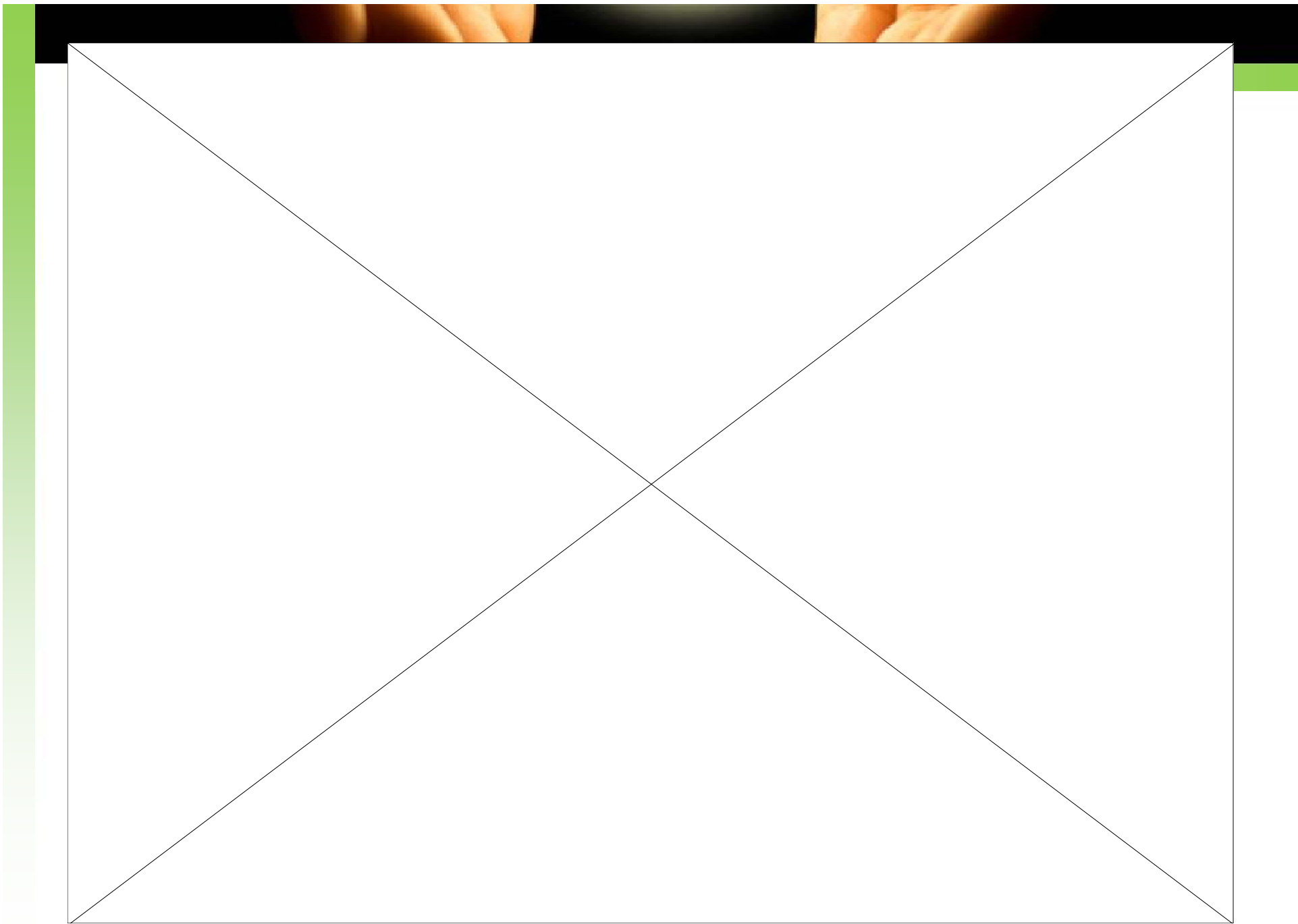
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Fully

### **EXAMPLE:** to Score “Fully” = 3 Points

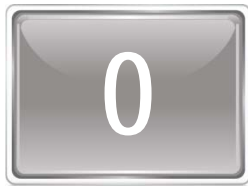
- We partner with other public and/or private sector organizations in the provision of water-related services for our customers
- We have formal agreements with multiple other public/private entities based on mutual benefit or shared risk
- We have a defined process to evaluate new or renew “partnerships”



# *Rate Your Utility: How Strategic Are You?*

## **IMPERATIVE #3** Total Systems View

We consider all of the technological, financial, physical, and regulatory practices that affect sustainable water resources and infrastructure.



Little or  
None



Some



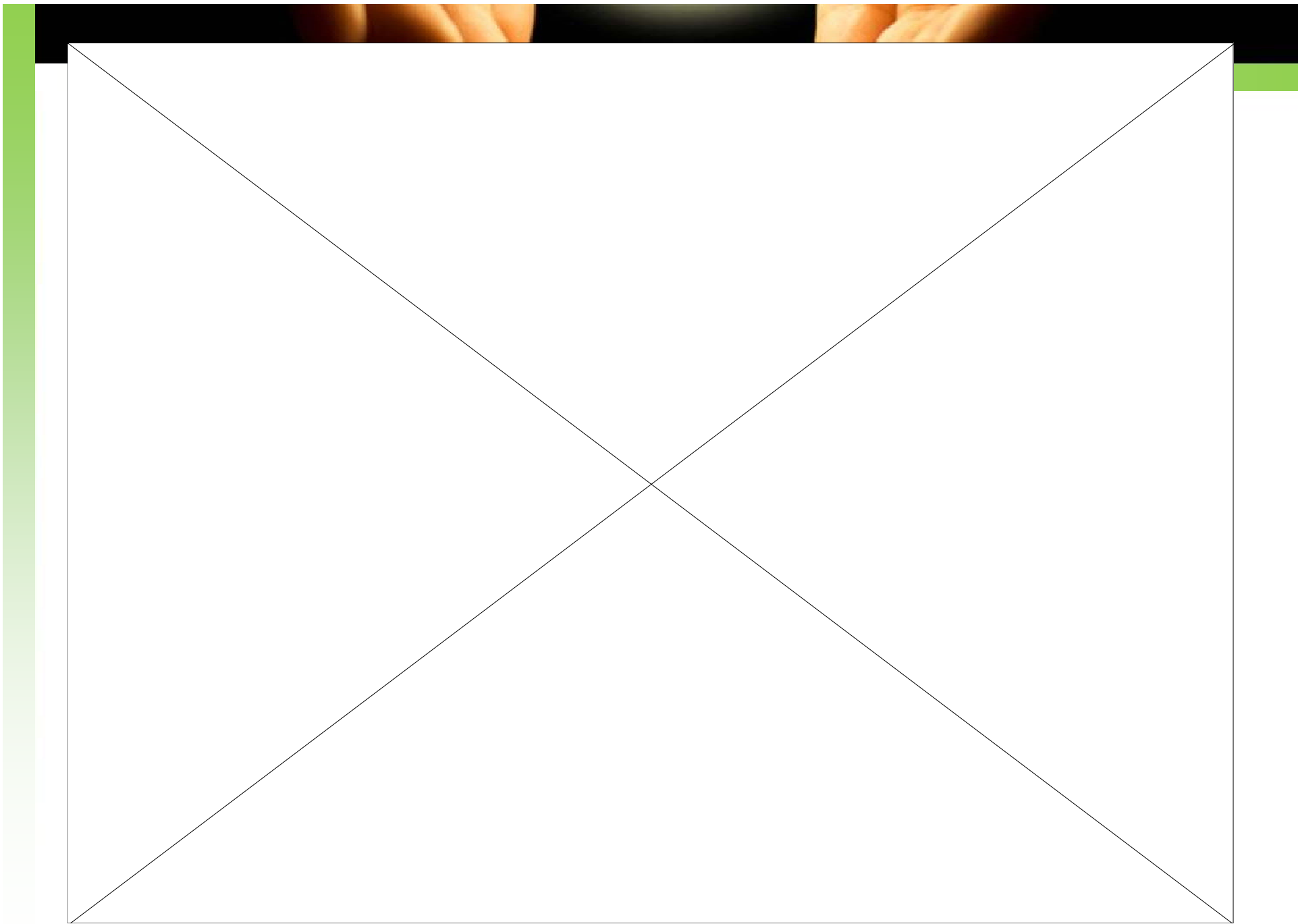
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Fully

## **EXAMPLE:** to Score “Fully” = 3 Points

- We address the full life-cycle of all built and natural infrastructure
- Our business and operational practices consider the total water cycle and sustainable resource use (beyond meeting regulations)
- We periodically/regularly review our “systems” for improvement and implement changes (e.g. P-D-C-A cycle)





# *Rate Your Utility: How Strategic Are You?*

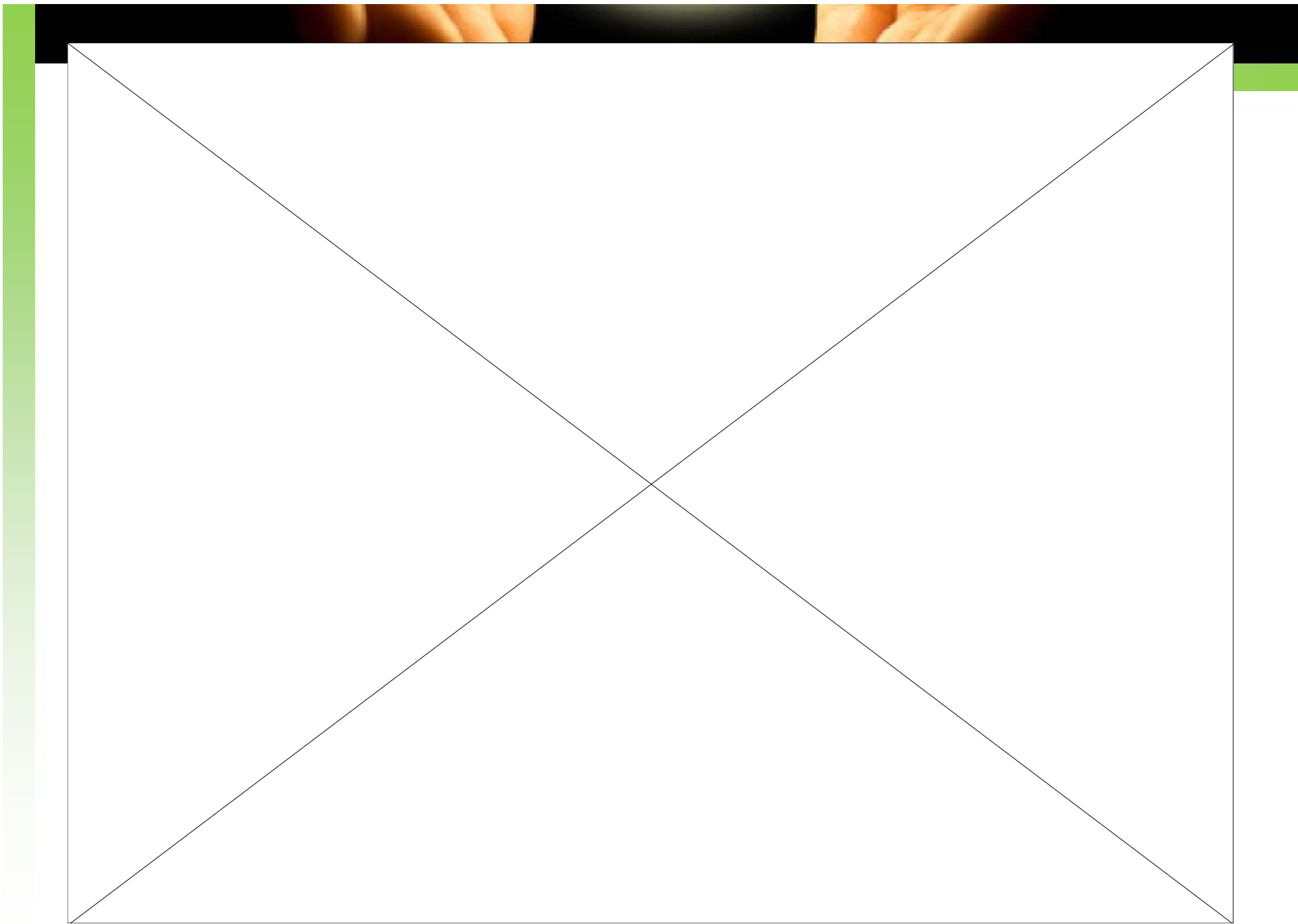
## **IMPERATIVE #4** Rate Making/Financing

We use rate structures that contribute to the long term financial viability and sustainability of the utility.



## **EXAMPLE:** to Score "Fully" = 3 Points

- We apply full cost-of-service to our rates including O&M costs, current debt retirement and value of existing "paid for" assets (replacement \$)
- We update our rates regularly by a multi-year rate projection based on future capital/operational needs and financing plan
- We require a formal "business case" for all significant investment decisions



## *Rate Your Utility: How Strategic Are You?*

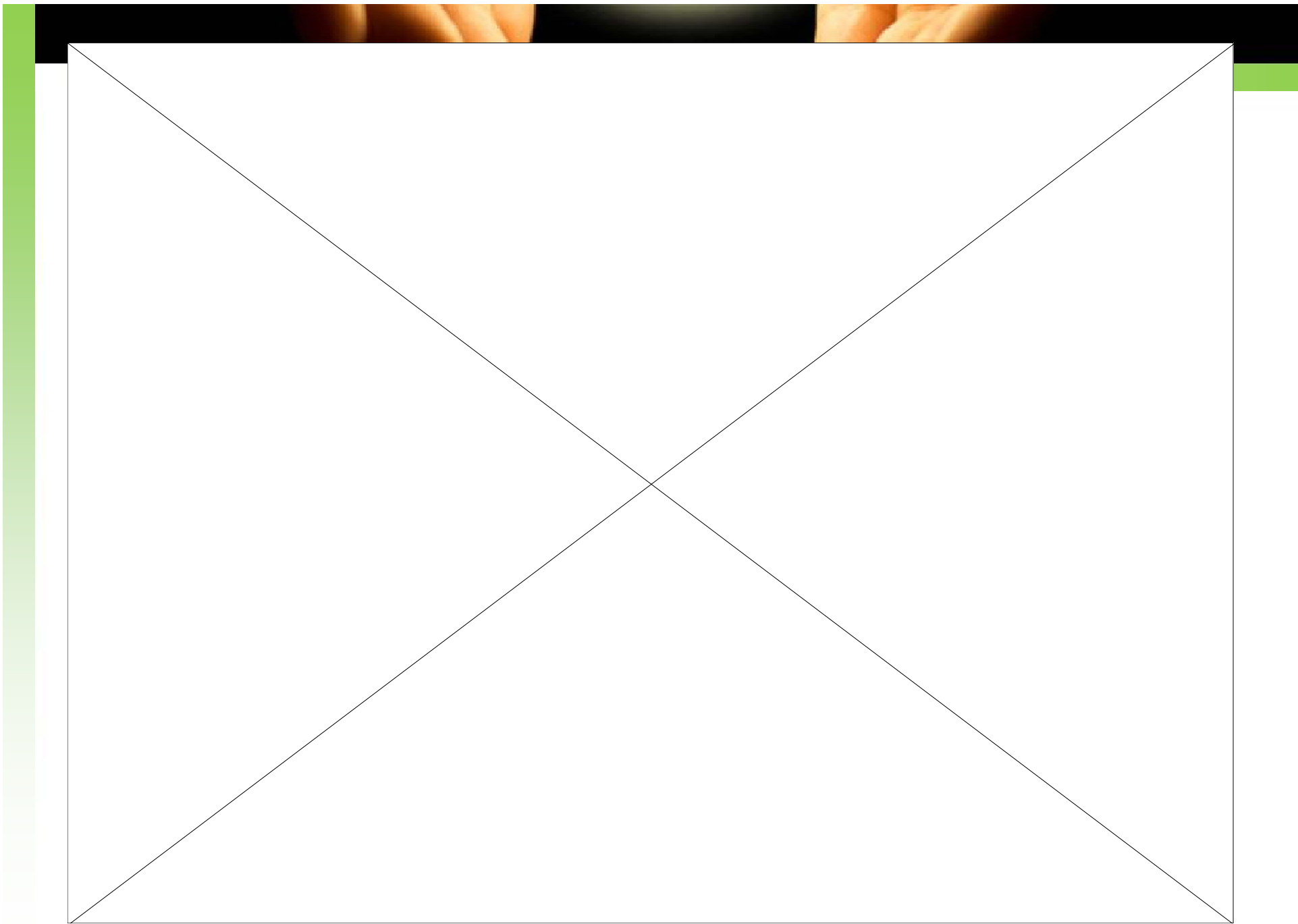
### **IMPERATIVE #5** Applied Information and Control Technology

We use technology to effectively meet challenges of efficient operation, exceptional service, and meaningful public engagement.



### **EXAMPLE:** to Score “Fully” = 3 Points

- We apply technology well in all areas to improve our utility's efficiency and customer service interactions
- Staff know how to best use the appropriate systems and information for decision making and future planning
- We plan for and regularly update and integrate new technologies

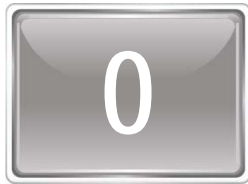


# *Rate Your Utility: How Strategic Are You?*

## **IMPERATIVE #6** 21<sup>st</sup> Century Leadership Skills

Our leaders possess three clusters of leadership knowledge and skills to respond to:

- Context - business risk and opportunities
- Complexity - lack of certainty, lack of agreement
- Connectedness – build effective relationships with new kinds of partners



Little or  
None



Some



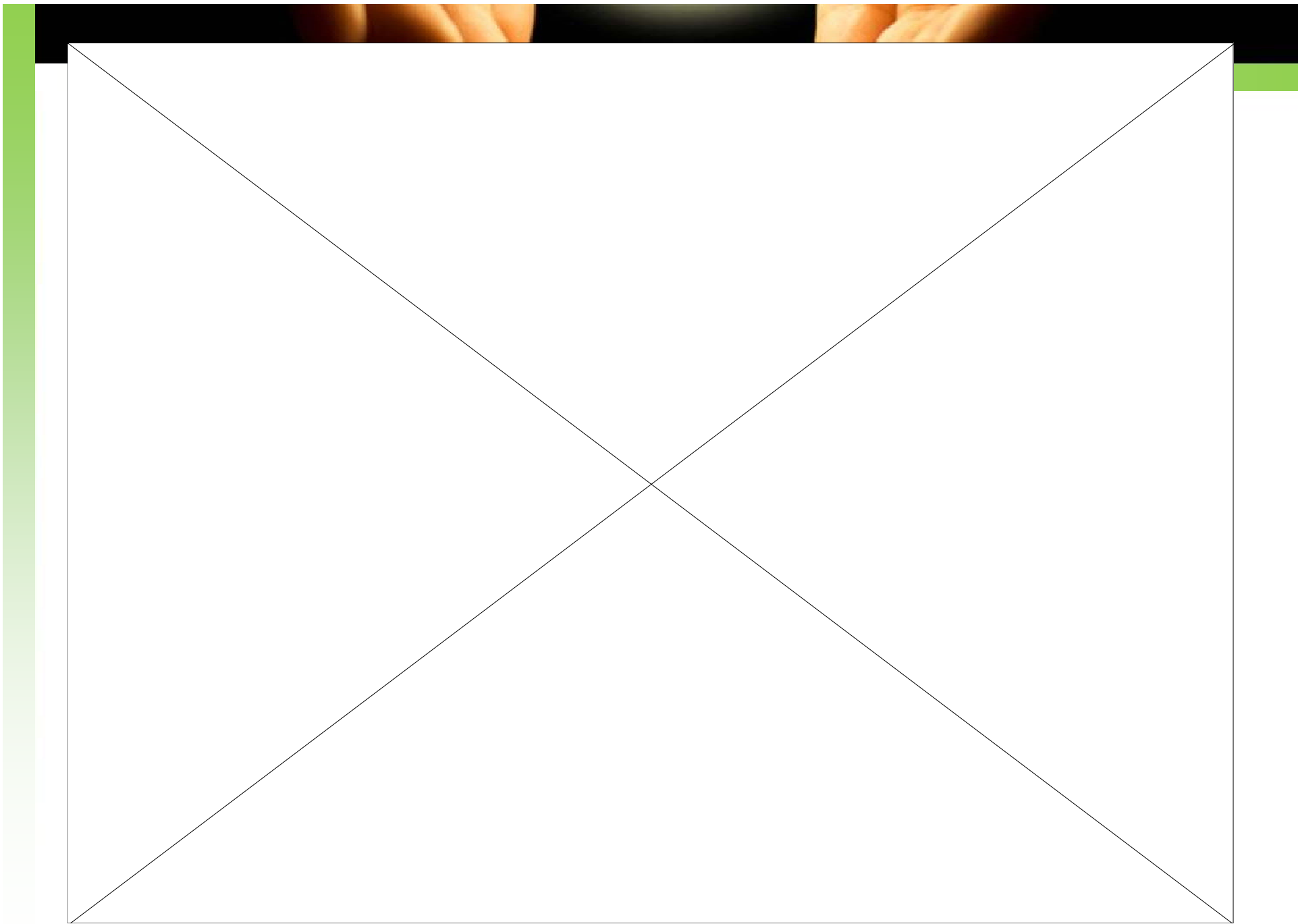
A Lot



Fully

## **EXAMPLE:** to Score “Fully” = 3 Points

- Our leaders regularly engage and influence diverse groups
- Our leaders effectively handle complex and divisive situations
- We have the leadership capability and capacity we need now
- We develop our future leaders and recruit new leaders to fill gaps

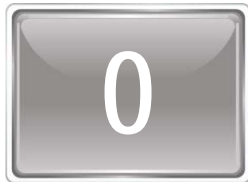




# *Rate Your Utility: How Strategic Are You?*

## **IMPERATIVE #7** Adaptive Planning and Implementation

We have a strategic planning process that facilitates the development and implementation of robust strategies under various levels of uncertainty in environmental and economic climates.



Little or  
None



Some



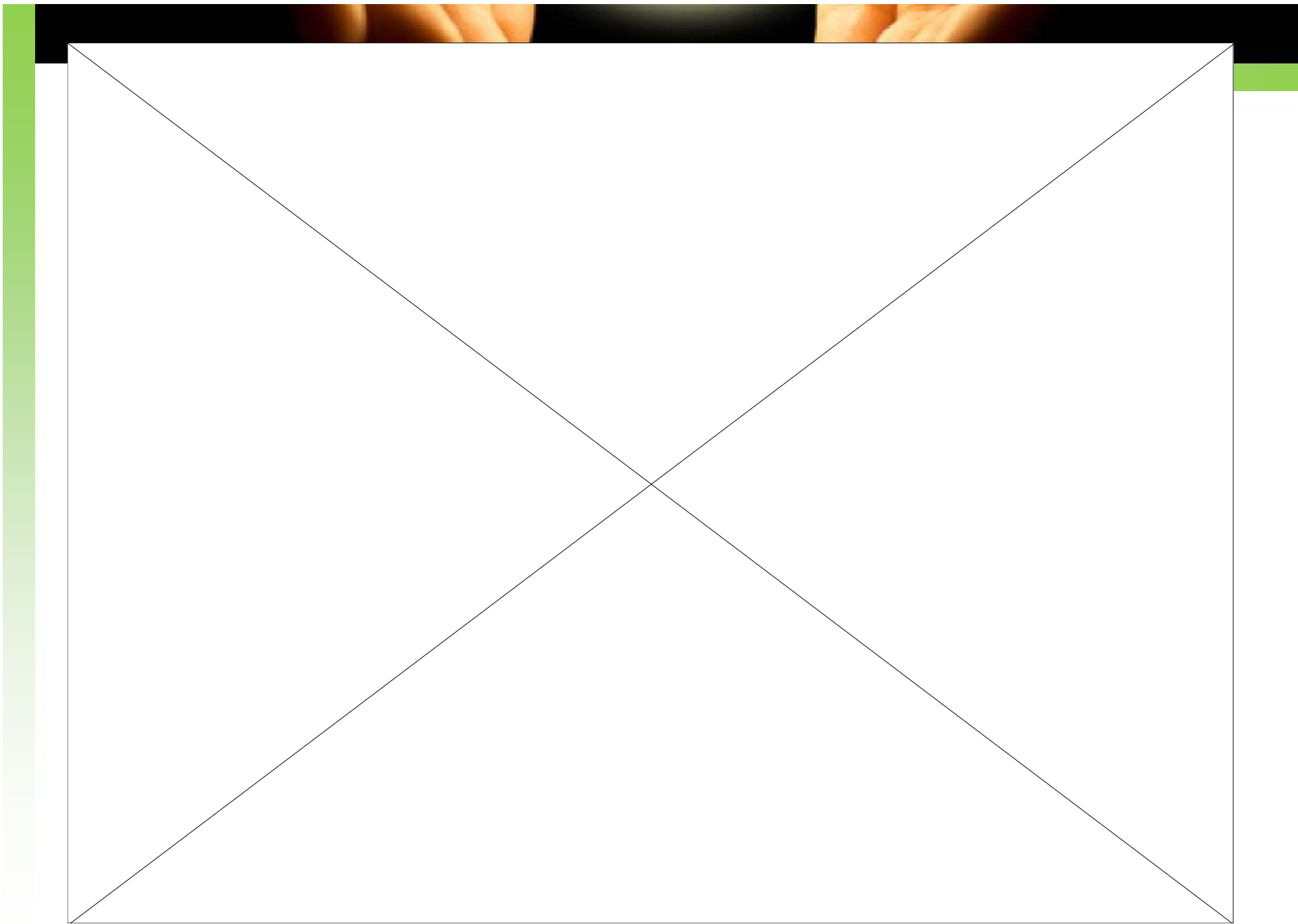
A Lot



Fully

### **EXAMPLE:** to Score “Fully” = 3 Points

- We periodically “scan” for changing trends, threats, and opportunities on the horizon in the next 5-10 years
- We have well-defined organization goals and strategies to implement programs/initiatives with responsible and committed teams
- We have a designated strategic/business planning team that regularly reviews our progress and makes necessary changes/adjustments



# *Tally your score*



Little or  
None



Some



A Lot



Fully

- #1: Communication: Multi-Faceted Engagement ☐
- #2: Collaboration/Partnerships ☐
- #3: Total Systems View ☐
- #4: Rate-Making/Financing ☐
- #5: Applied Information and Control Technology ☐
- #6: 21<sup>st</sup> Century Leadership Skills ☐
- #7: Adaptive Planning and Implementation ☐

**Total Score:**

☐

# *How Did You Score?*

*(how much do you need to change?)*

Very Strategic

16-21

"Above Average"

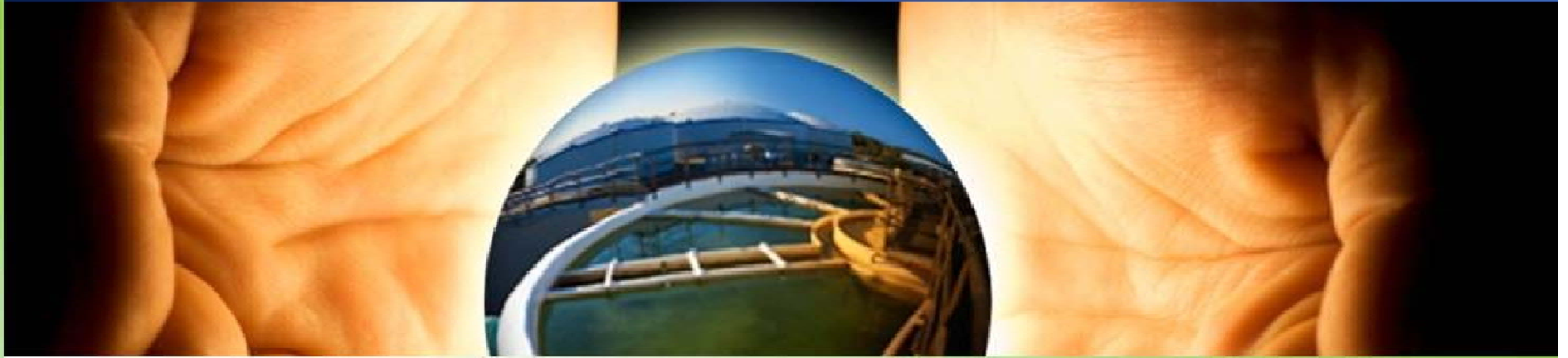
11-15

Getting By

6-10

In-Trouble

0-5



# *SECTION 3*

*Using the Strategic Imperatives To  
Implement Better Strategies*

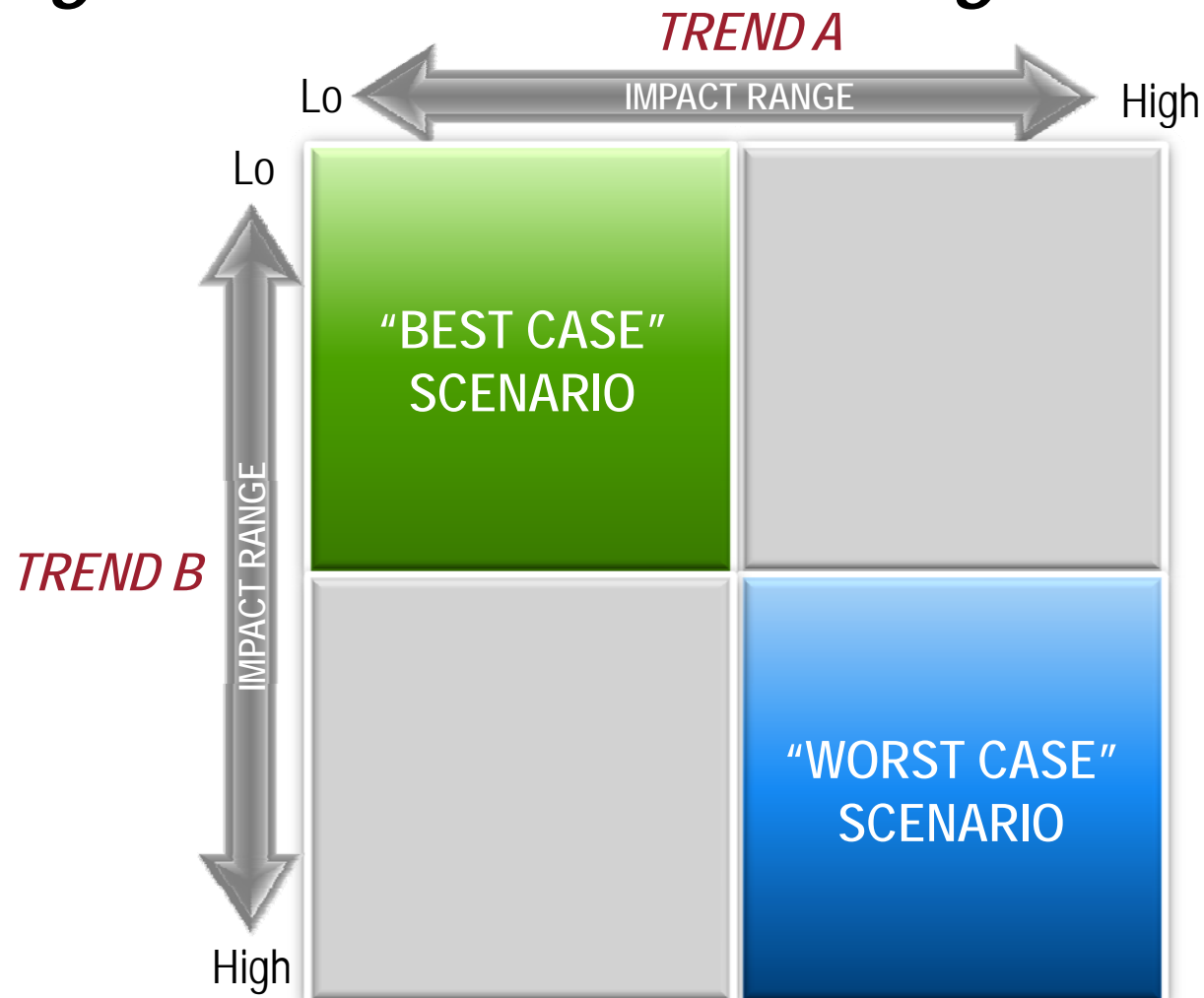


## *Strategy Is All About Change*

- What must be different from today to go forward successfully? (Answer: **Strategic Imperatives**)
- Strategy is also about making choices (because time and resources are limited)
- The best strategies (most robust) will work for a range of trends/impacts
- The best strategies also work even if trends/impacts are less than predicted (e.g., "No Regrets")



# *Scenario-Based Analysis Can Stretch Our Thinking For More Robust Strategies*

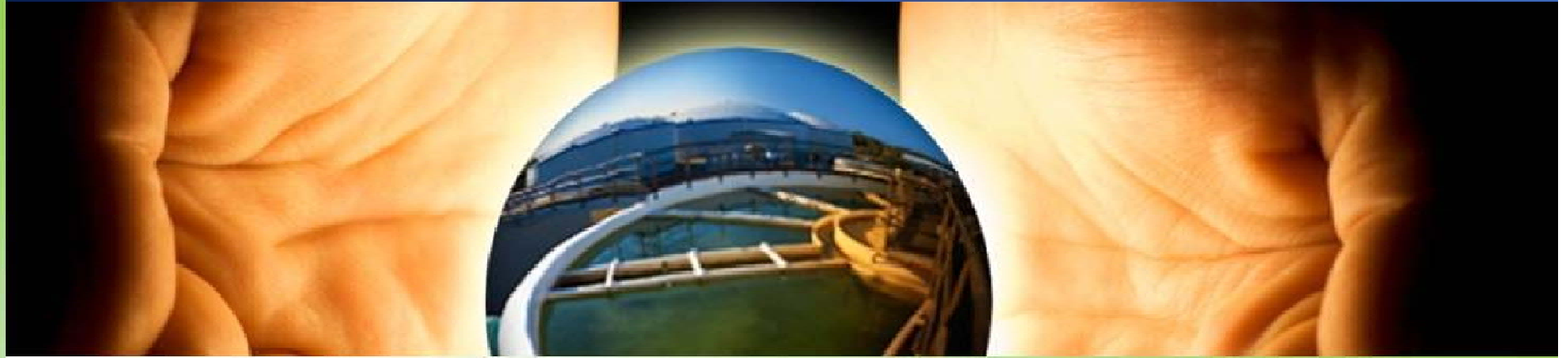


*Develop Strategies to Address Scenarios*



## *Utilities Can Use Scenario-Based Analysis To Improve Your Own Strategies*

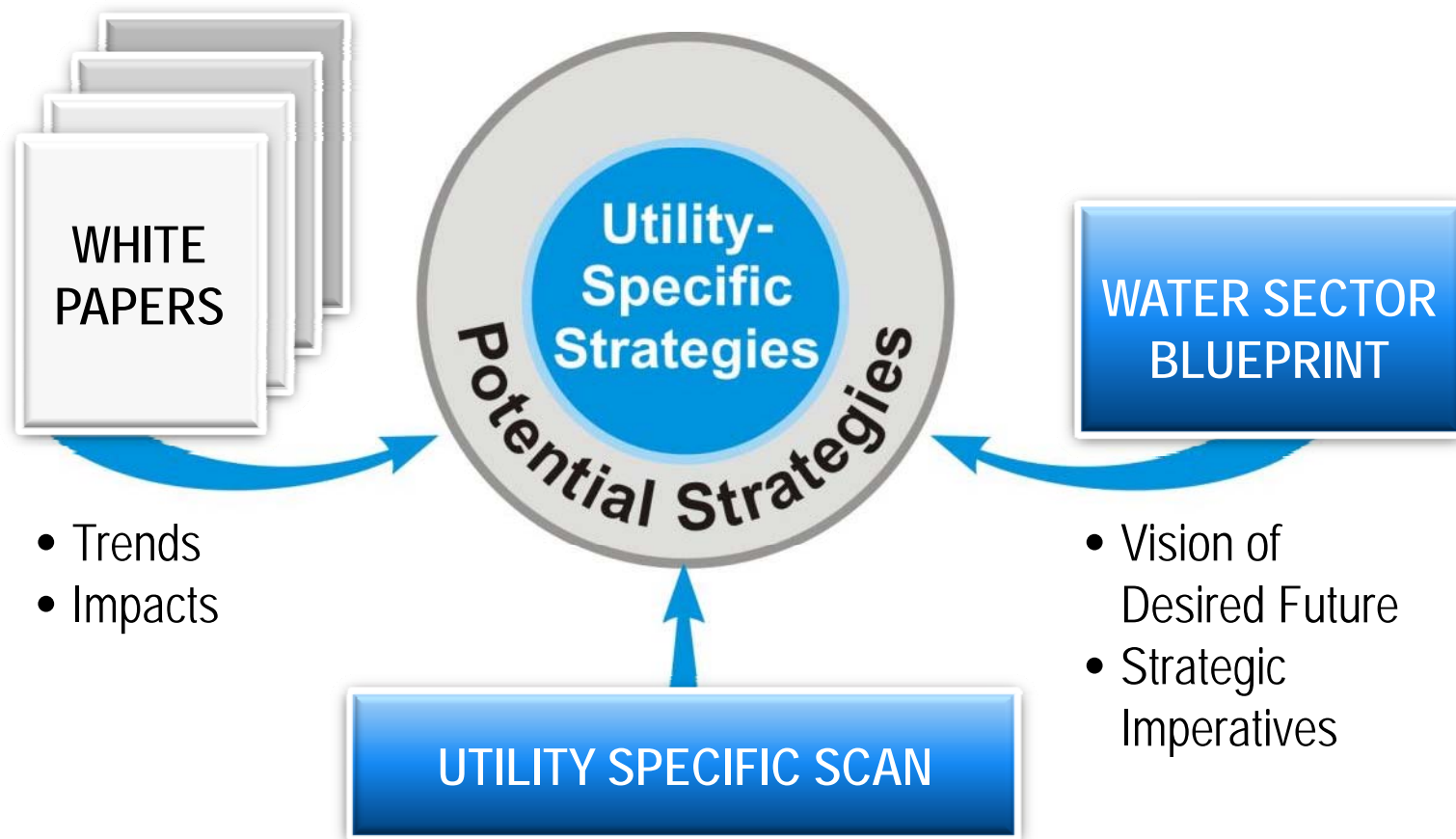
- Define most significant trends and plausible impacts
- Select most challenging scenarios based on the combination of two trends
- Analyze using matrix to look at “best case” to “worst case” scenarios
- Brainstorm potential strategies (**use the Strategic Imperatives**)
- Develop and implement utility-specific strategies



# *SECTION 4*

## *Conclusion*

# *Use Research Results To Drive Development Or Adjust Utility-Specific Strategies*





## *You Can Implement Your Best Strategies With These Steps*

- Use the Strategic Imperatives To Rate Your Utility (know how much you need to change)
- Define Your Most Significant Trends and Plausible Impacts
- Use a Scenario-Based Approach With the Strategic Imperatives
- Develop and Implement Your Best Strategies

# *Questions*

To learn more, please contact  
[tbrueck@ema-inc.com](mailto:tbrueck@ema-inc.com)

