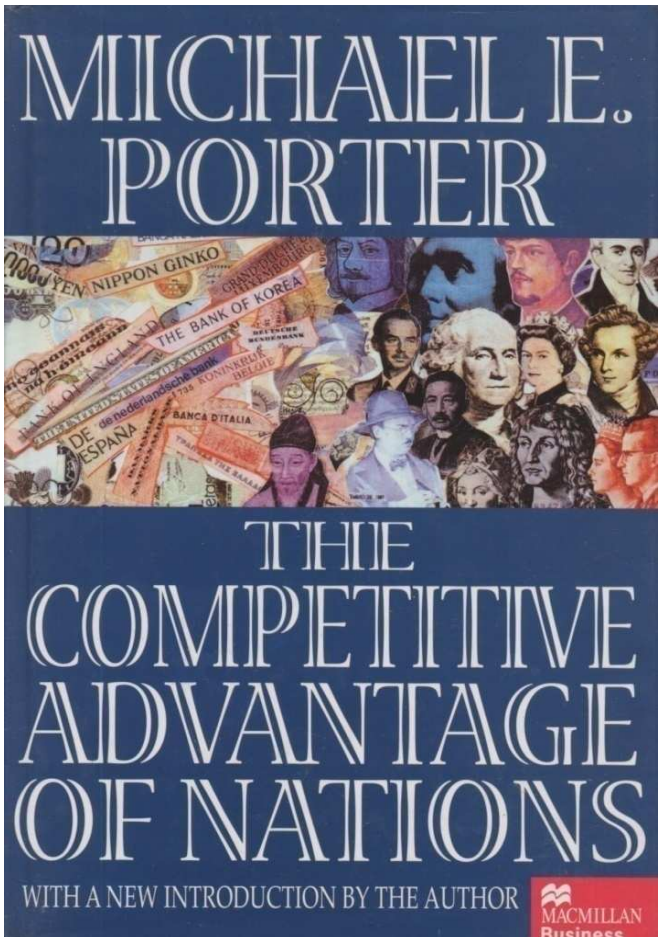

TELECOMMUNICATION
BUSINESS
GOING
green
On Regulation
Dr. Riant Nugroho

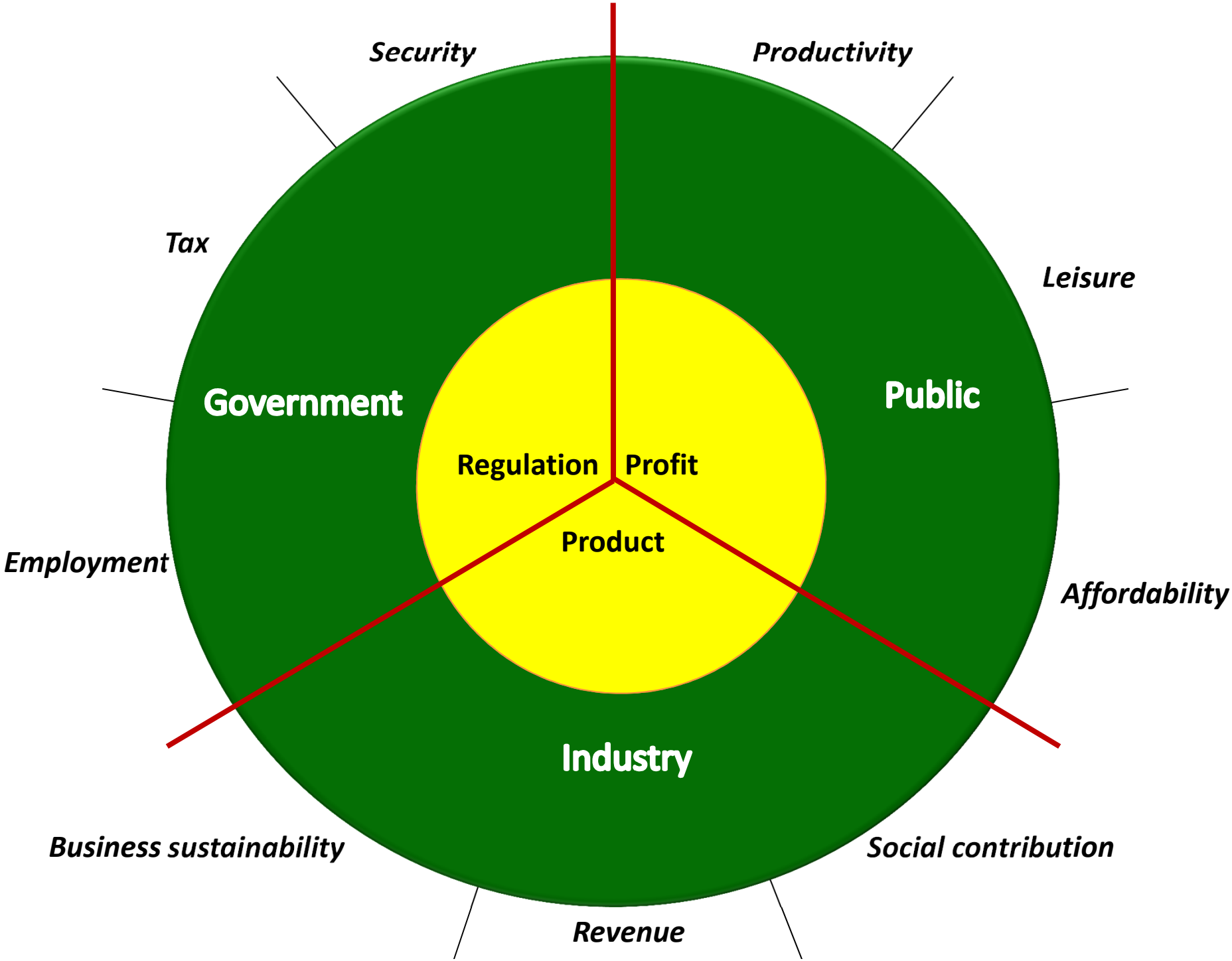
Goverment matter !

- ....For government, old distinction between laissez-faire and intervention are obsolete.

  Government, first and foremost, must strive to create an environment sup-ports rising productivity... Govern-ment must strive to improve business environment in many ways. (It must not, however, limit competition or ease standard for safety and environment empact. Such "help" actually retards competitiveness by stunting innovation and slowing productivity improvement")

(Michael E. Porter, *Competitive Advantage of Nations,* 1998)




Security
Productivity
Tax
Leisure
Government
Public
Regulation
Profit
Product
Employment
Affordability
Industry
Business sustainability
Social contribution
Revenue

Regulation is leaning to…

- The nature of the business
- The nature of the business environment

What is business ?

- It is when the industry meet the market.



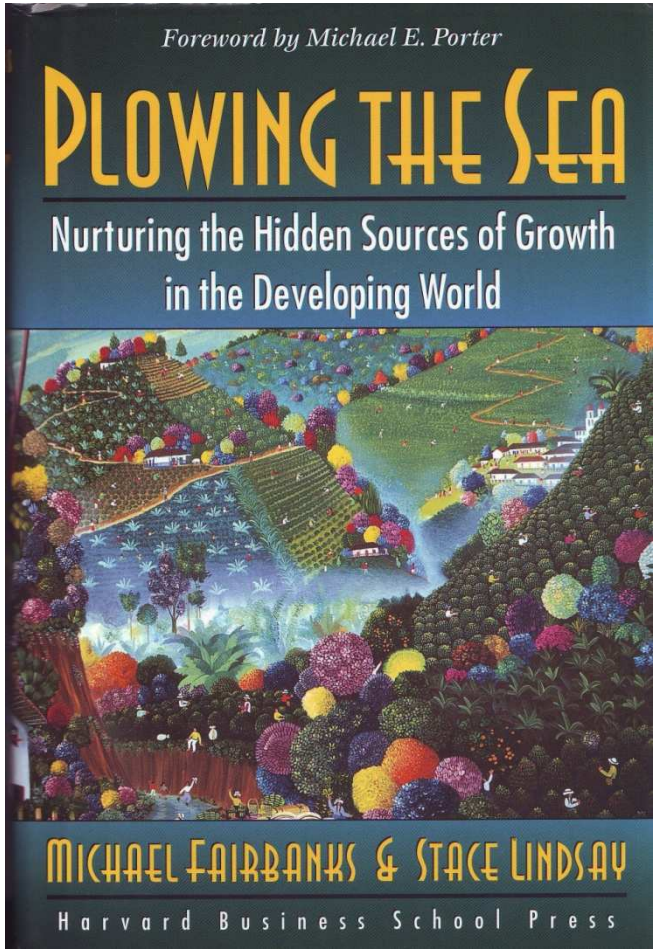
The business is failed as its neglect those facts

- The world is changing –tremendous changing– but the business is not, and they tell their customer that the changing is a myth.



A great many developing nations are in economic crises today, but not exactly because they are doing the wrong things. Rather, **they are doing the right things for times they no longer live in.**

Michael Fairbanks & Stacey Lindsay (1997)

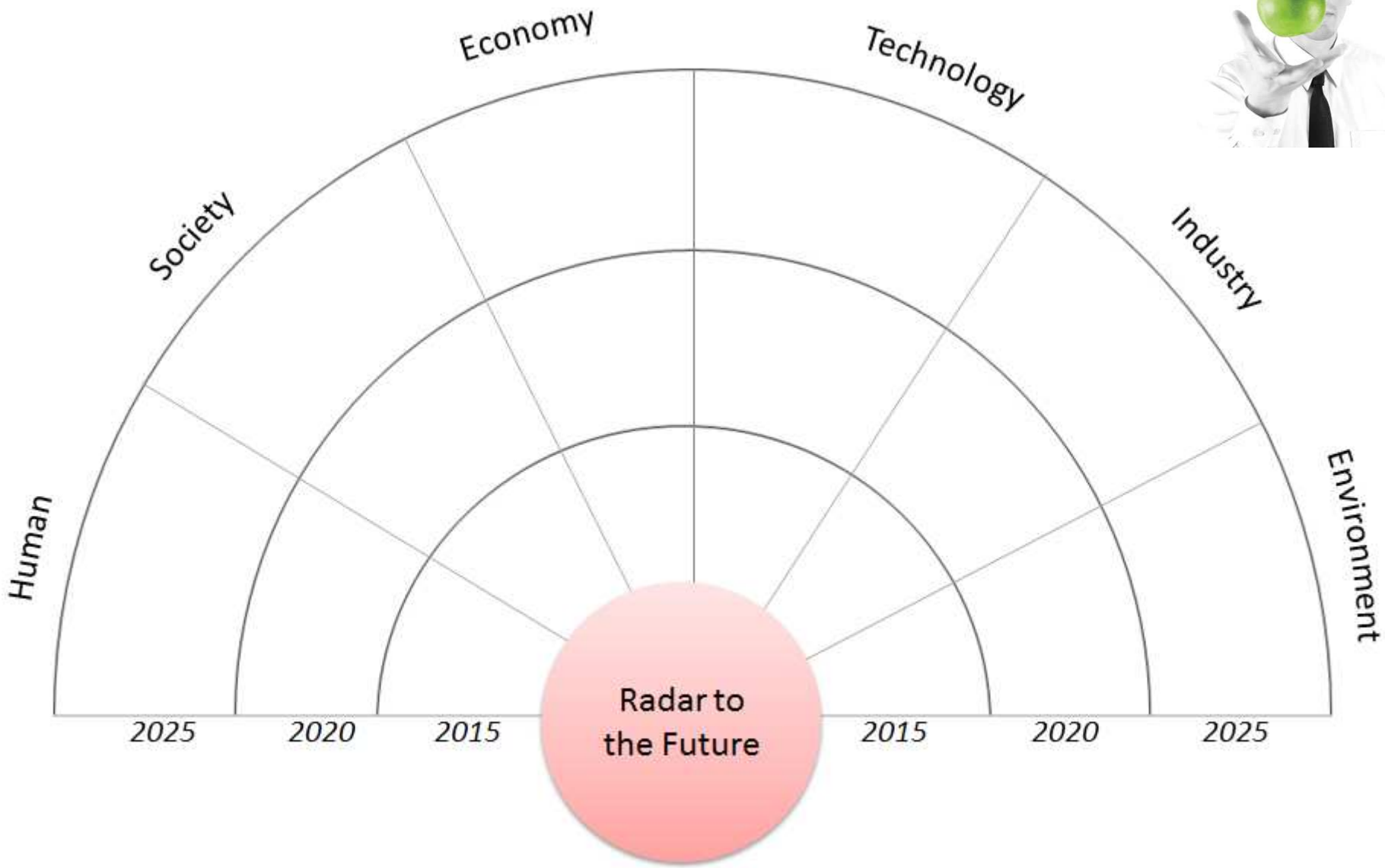


Basic facts

1. Human
2. Society
3. Economy
4. Technology
5. Industry
6. Environment



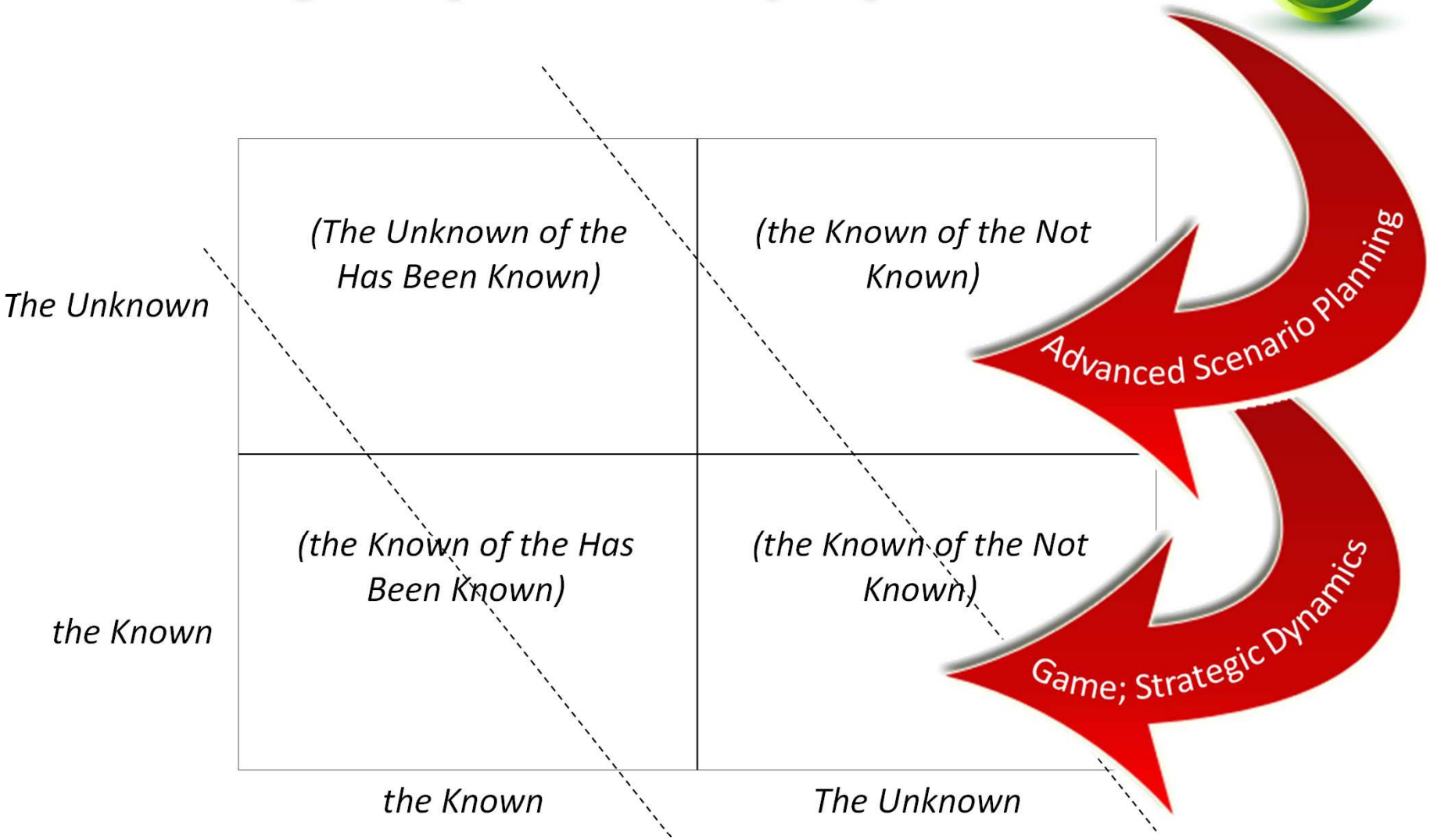



Human
Society
Economy
Technology
Industry
Environment
2025
2020
2015
Radar to
the Future
2015
2020
2025

10 Notes from the future

1. **People obsessed to bustle-An anti-social society**, as there will be a hyper-social-networked society
2. **Technology driven civilization** –and telco-internet-television at the forefront
3. **Virtual memory**. In 2020, human brain can be downloaded: a) human being, 2) improved human being (Ian Person, BT Futurology, UK)
4. **Fast is more important than accurate** – as there are multitasking generation
5. **Free economy** –content; network will be "public good"
6. After virtual memory, then ***virtual bank***: they are *wall mart, apple, google, toyota…. Telkomsel.*
7. **Supermarket will have more attendants** than Disneyland
8. **Car owner will pay 5 times**: car and its services, tax, fuel, carbon emission, and road-tax
9. **Youth behavior.** In 2017, 80% - 90% online trading by youth (15-19) through cellphones, and 75% of researches will be conducted online from cellphone
10. **Digital economy.** In 2020 : 10% cash transaction, and up to 90% will be digital. Cellphone will be the most favorite wallet (AC Nielsen)

Rethinking the future and far future



Developing "Telco Green Business"



To maintain the business; to keep survive? NO

To adapt the business strategy ? NO

To be the winner? NO

Philosophy

Assumption (Theory)

Practice

To became a leader in business →

"VCB"

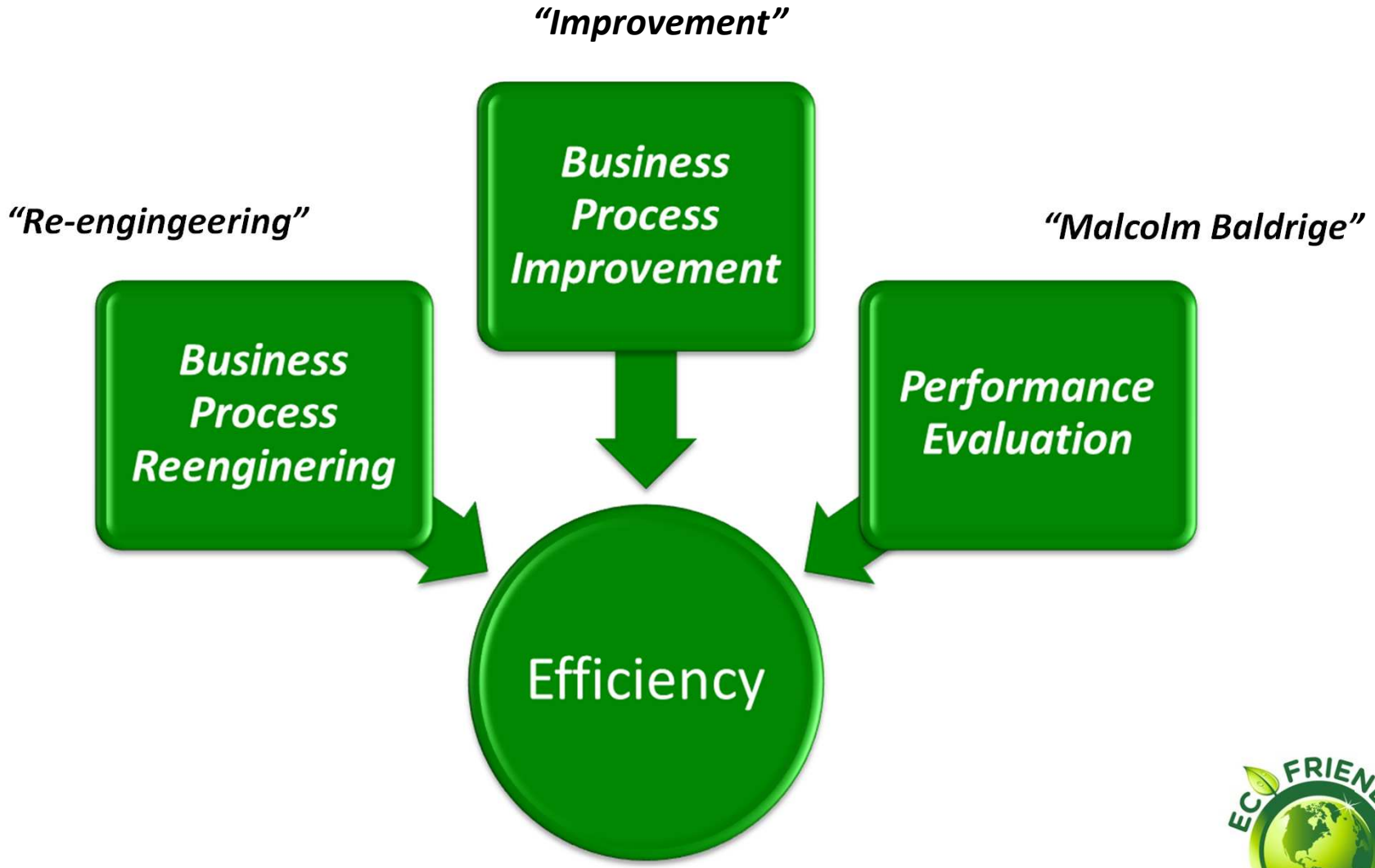
To create a new business strategy →

"BOS"

To became the great →

"G_2G"

Business process



Organizational Reform

1. Reorienting
2. Restructuring
3. Aligning



"RRA"



- Redefining business mission, corporate vision, and strategic management
- There are different mission of SOEs :
  1. Profit
  2. Social services
  3. Investment

- Changing the people, structure, process, and values
- Rolling-up through merger and acquisition to create holding companies while some preserve as standalone
- Promoting three level of institutional capability:
  1. Efficiency
  2. Value added
  3. **Value creation**

- Local : IPO, EmBOs, strategic partnership, strategic sales, and private placement. Corporate social responsibilities.
- Global : international strategic partnership, strategic sales, and private placement



Economization of Cellphone

1. “wallet” then “bank”
2. Advertising
3. Entertainment
4. Shopping mall
5. Research & education (“humanization”?)



“notes from the future”

1. Shared infrastructure
2. Green repeater ~ solar panels
3. Public-mobile repeater (mass rapid public transport)



Reused, not merely recycled

- To educate customer to conserve the SIM card

1. A campaign for customer change the number, but not the SIM card
2. A simple and effective system to handle number-change of customer



Reused, not merely recycled

- To educate customer to deliver the used cell-phone

1. A campaign for customer to give away the used ones
2. The customer will earn a certificate as the “Role Model of the Green Customer”
3. The business refurbished the cell-phone as good as it can be
4. The cellphone will be deliver to the smallholders business that need those refurbished cellphone



Battery

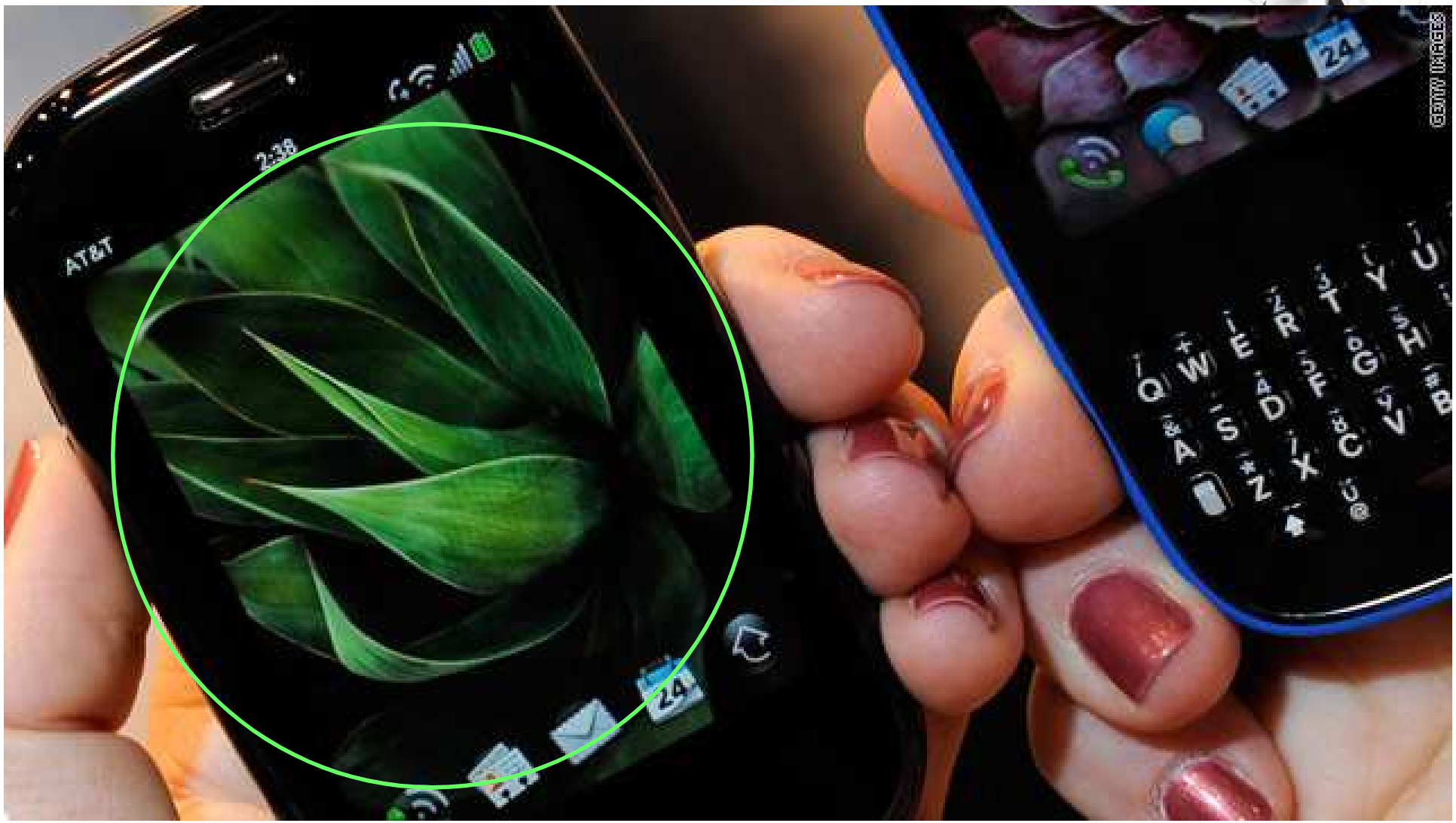


- To educate customer to preserve the environment from chemical pollution from cellphone battery

1. A place where every customer may throw away the used/leak battery
2. A business process that enable the used/leak battery recycled, or a safe used battery storage

Green on eye





Mind-Setting

- To empower society to come with the light-bulb idea of green Telco Business

1. A competition
2. A corporate funded research



Mind-Setting

- To empower other business to do green business in regard of Telco Business: reducing the transport traffic

1. Working from home
2. Flexi-time



It is not enough. Now, think about footprint

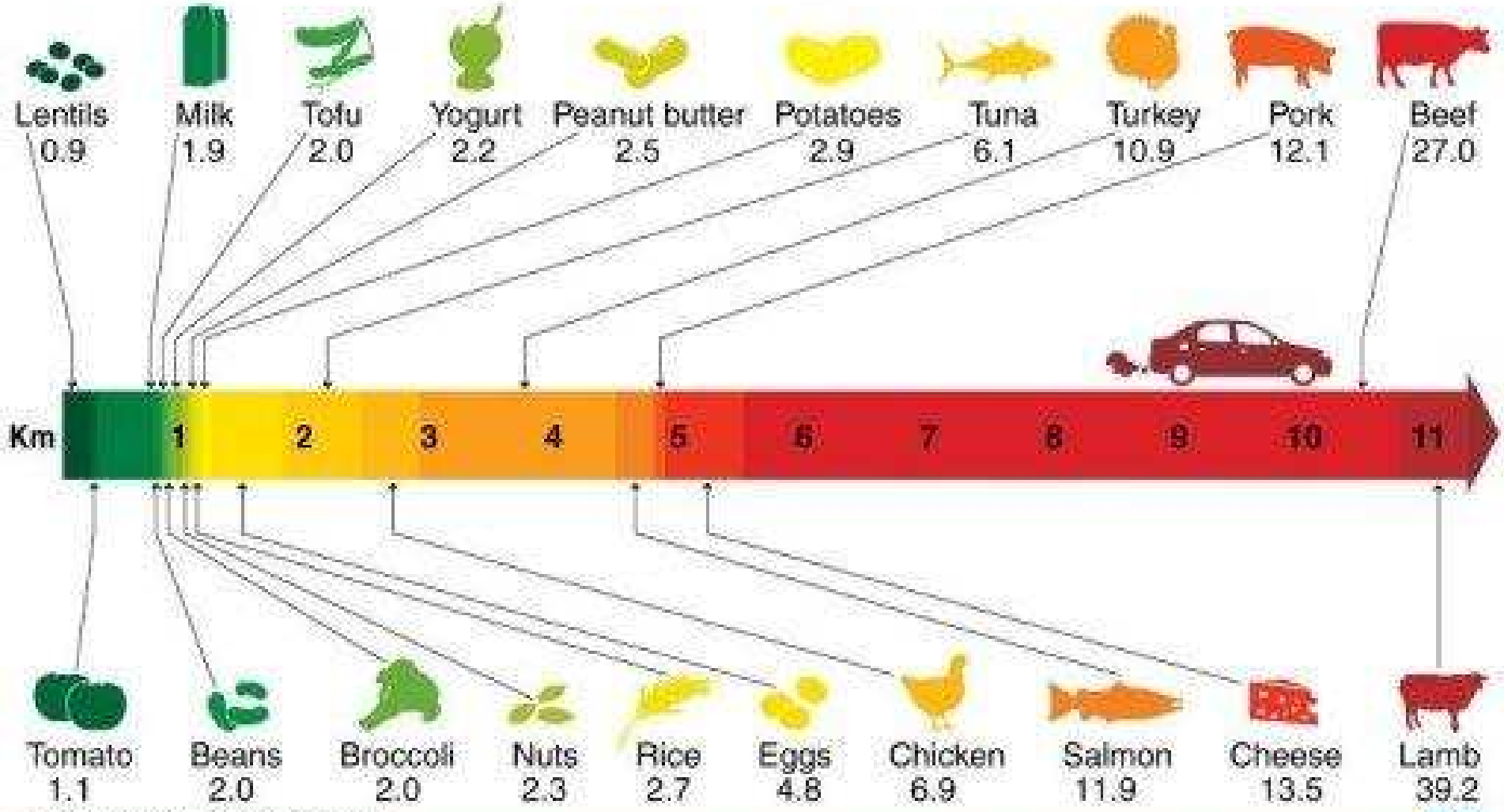




Carbon footprint of what you eat

Calculations of greenhouse gas emissions from the production, processing and transportation of specific food items

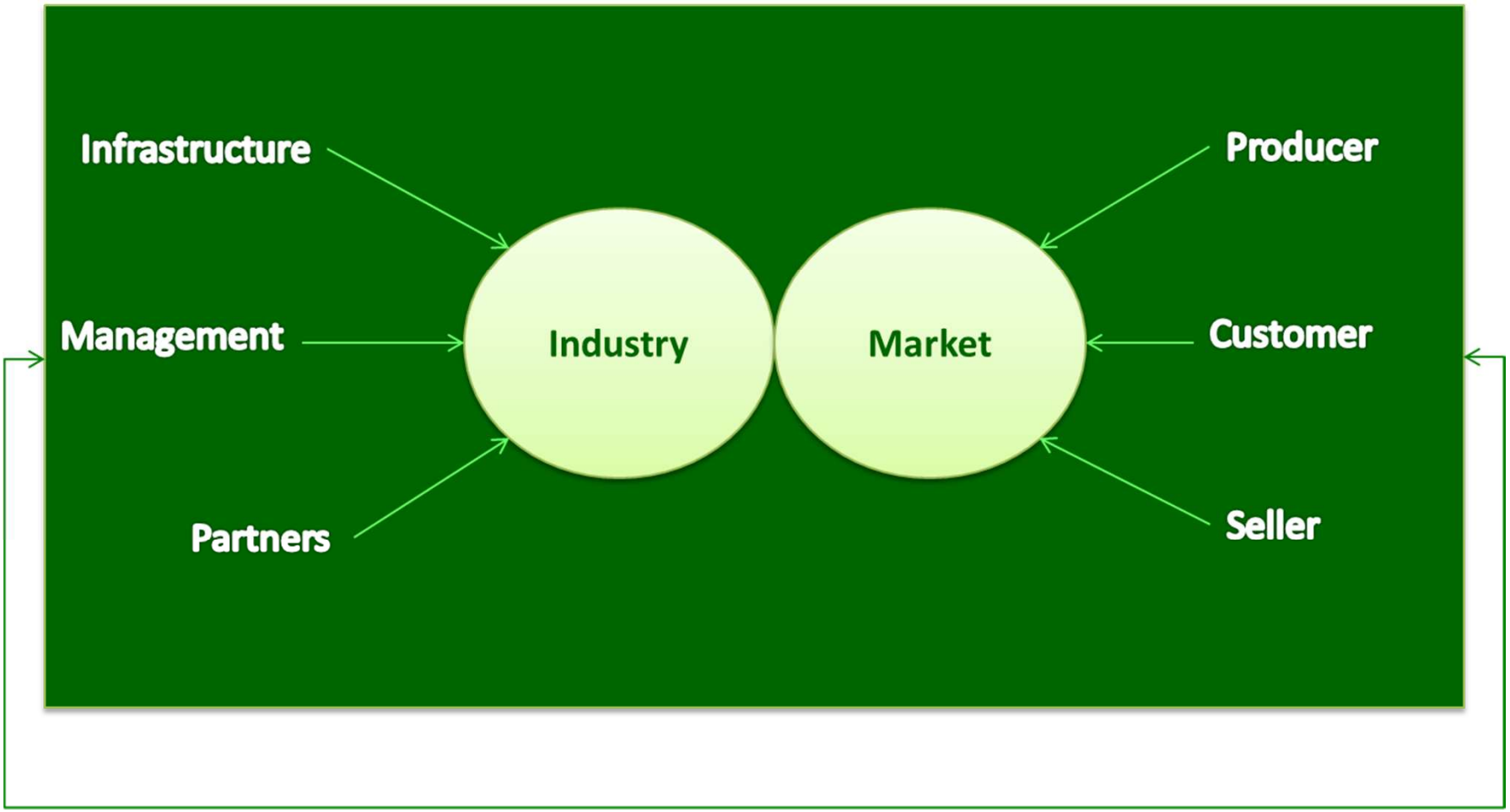
- Main chart compares 110g of food against a journey in a midsized car
- Number shows kg of carbon dioxide equivalent produced per 1kg of food



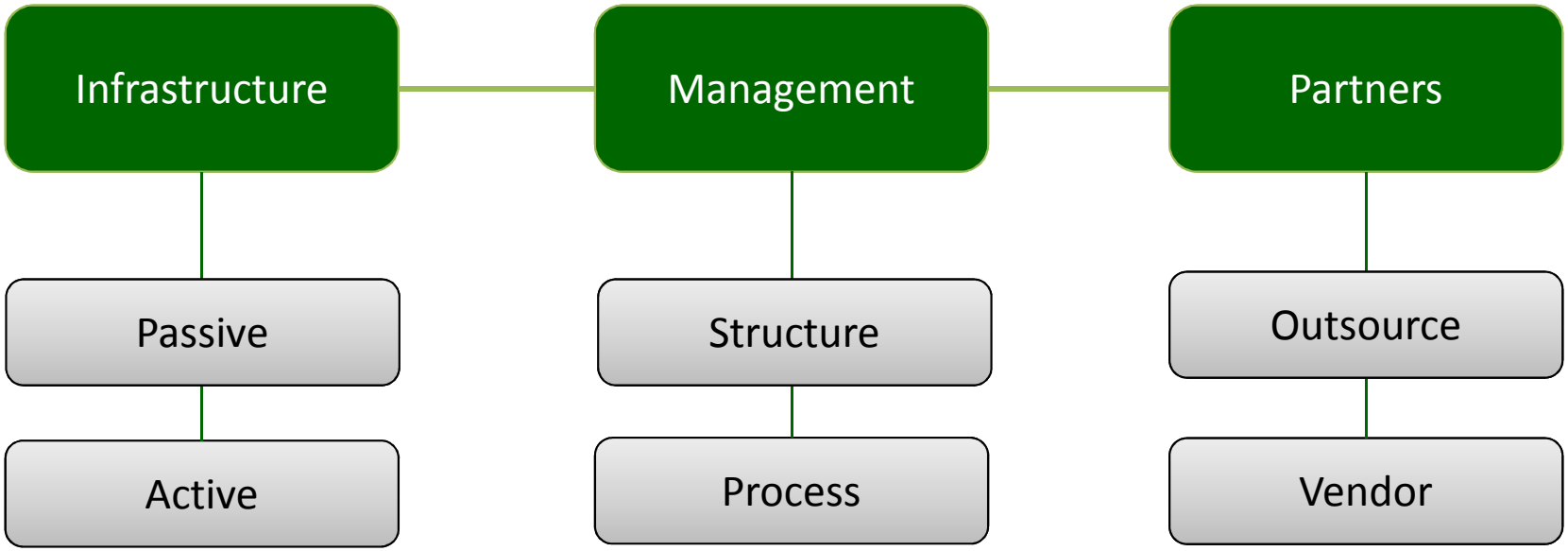
Source: Environmental Working Group

AFP

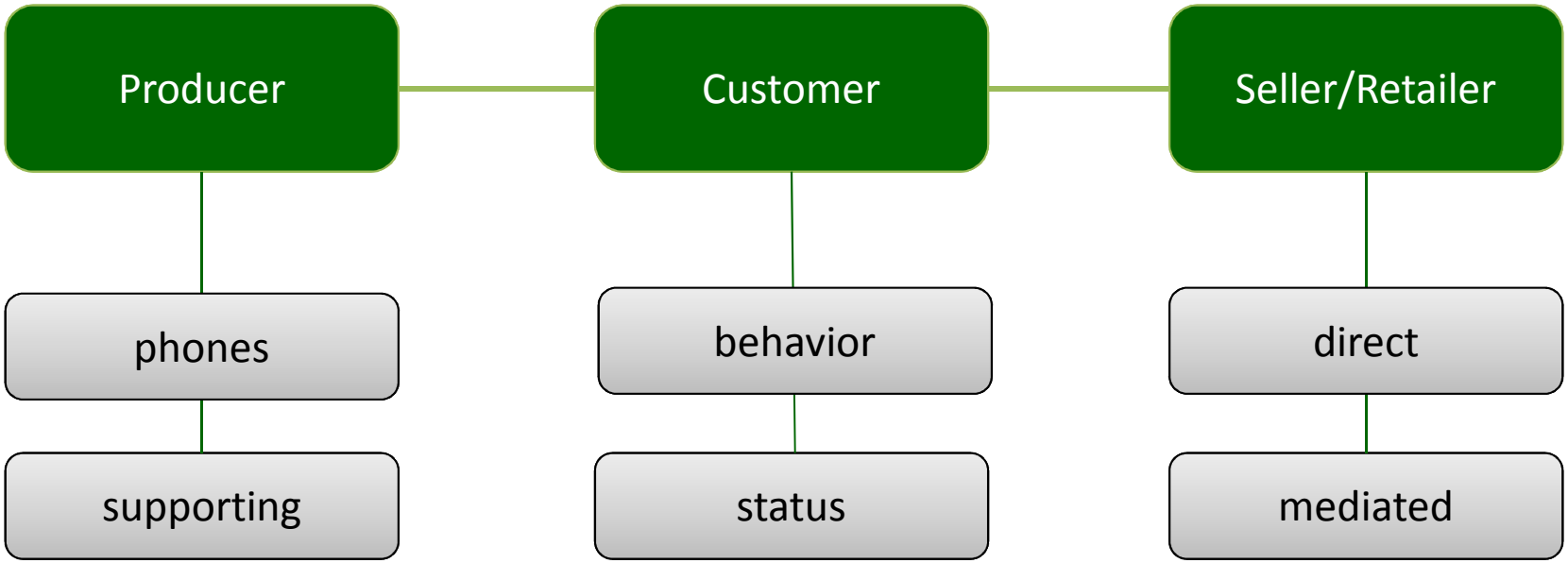
Telco Business



Industry's (carbon) footprint



Market's (carbon) footprint

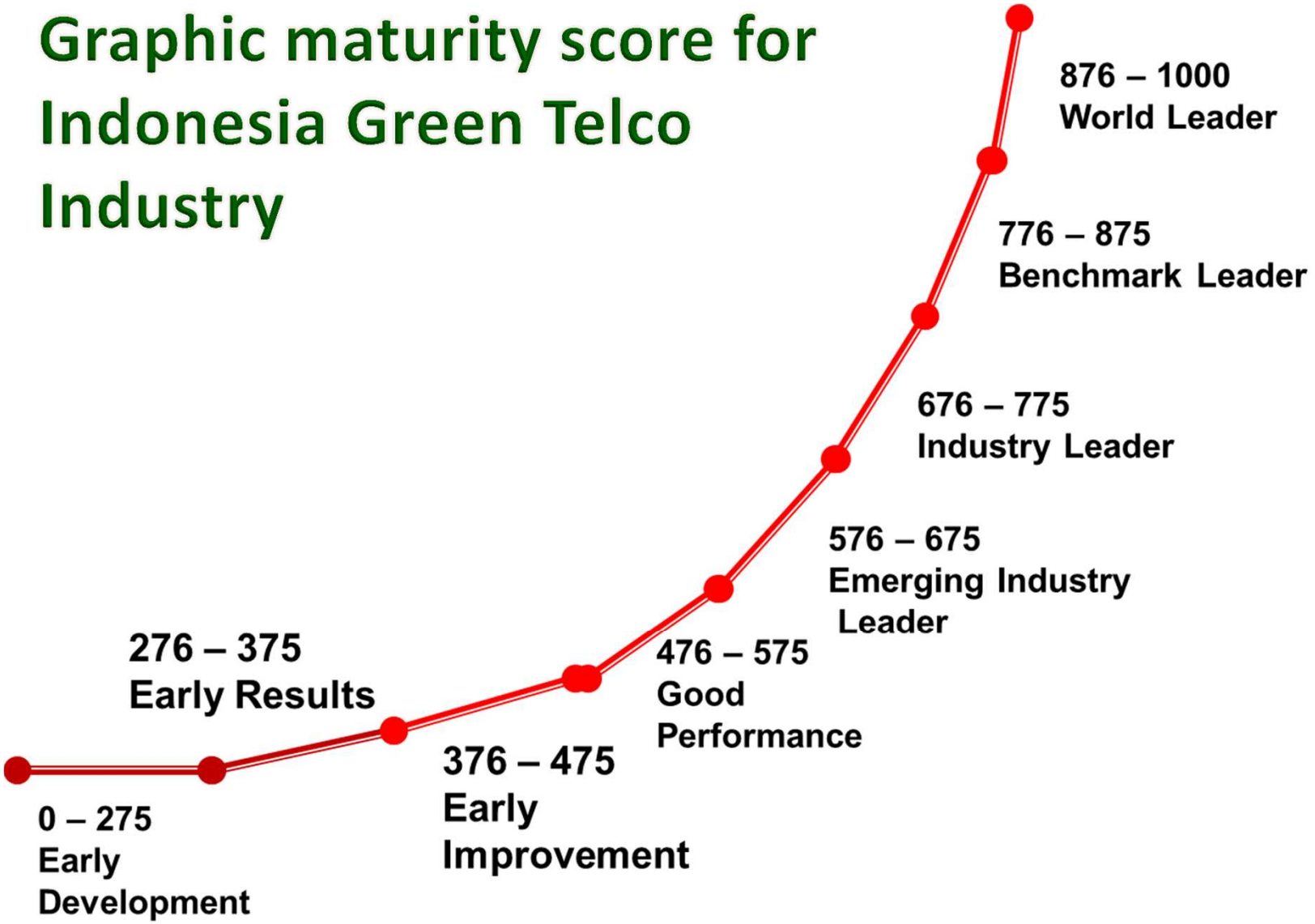


What we do now…

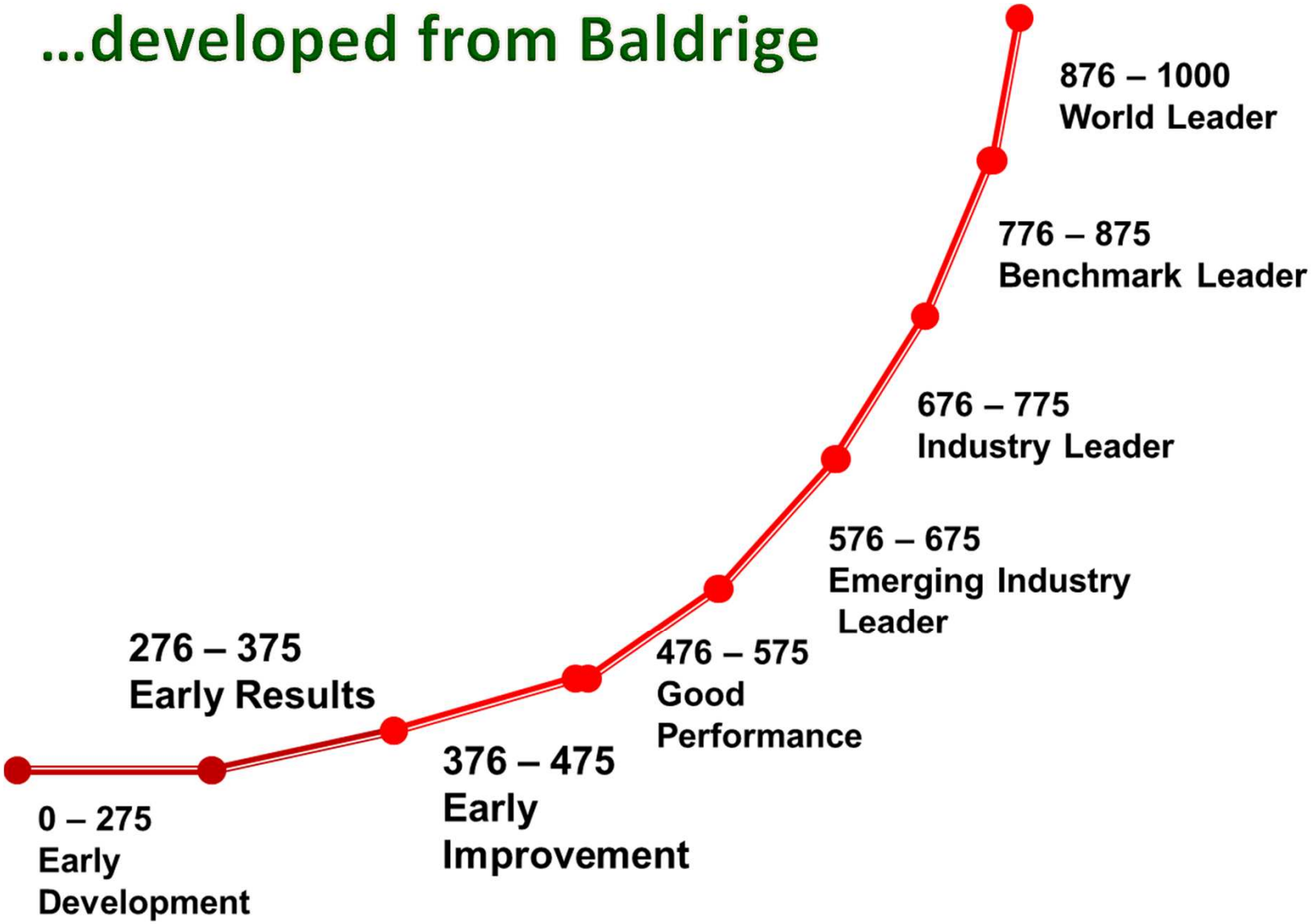
- …developing the method for “evaluating the green telco business” in Indonesia



Graphic maturity score for Indonesia Green Telco Industry

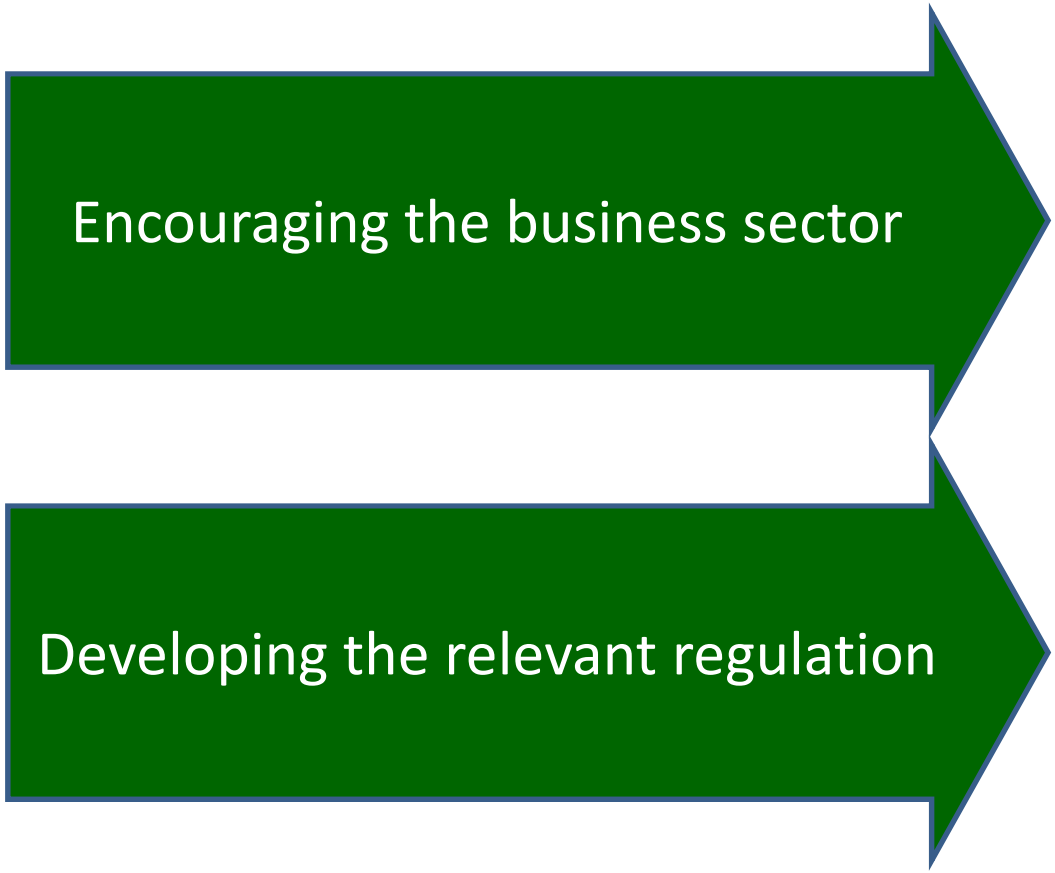


…developed from Baldrige



The green telco regulation in Indonesia

- **“We do not have the excellent ones, yet”**





Efforts

1. Infrastructure sharing
   - Backbone and Backhaul – *Palapa Ring* Project
   - Tower Sharing
   - National Roaming
2. Alternative Energy – less carbon



Case : Telkomsel Green Powered BTS

- **Solar**

Region	1	2	3	4	5	6	7	8	9	10	Total Site
Installed	14	19	1	-	1	2	18	23	18	36	132
On Going	2	-	-	-	-	-	4	12	8	2	38

Total capacity (installed): **1,148,645** Watts peak (Macro BTS)
Total capacity (installed): **426,640** Watts peak (Micro BTS in *USO Project*)
Total capacity (on going) : **352,600** Watts peak (PO 2009)

- **Micro hydro**

Telkomsel is installing microhydro power generation as pilot project in :
1.Suoh – Lampung,
Potential capacity : **16** kiloWatts
2. Teluk Wondama – Papua,
Potential capacity : **14** kiloWatts



Telkomsel Green Powered BTS

- **Hydrogen (Fuel cell)**

Region	1	10	Total Site
Installed	-	-	-
On Going	6	5	11

Total capacity (installed) : **11 system**
Total capacity (on going) : **22** kiloWatts (PO 2008)

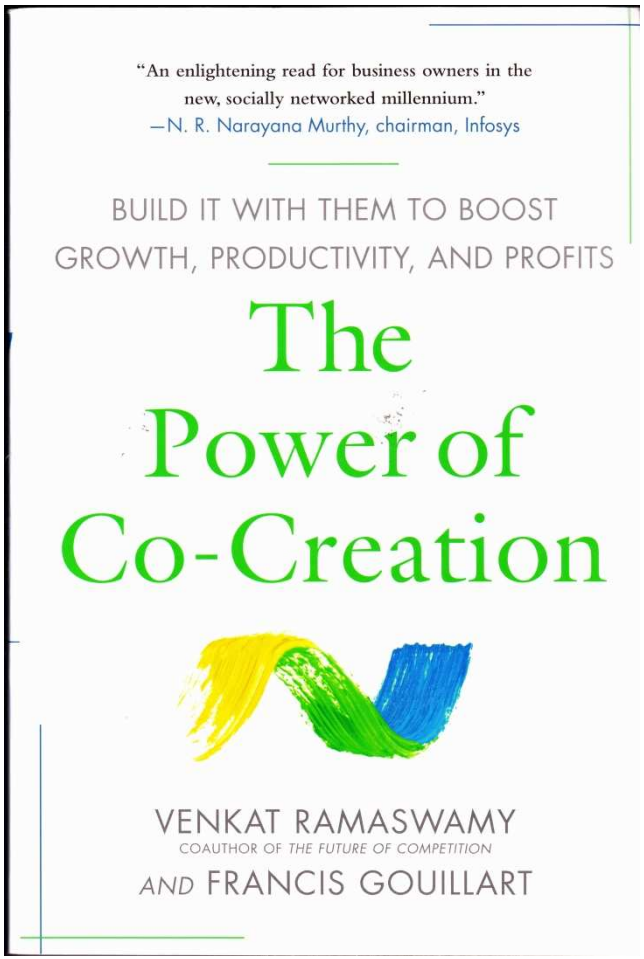


The regulation will be….





It is not “what to do”, but “how to do”



Who doing what? …Green Business Award (and, surely, incentives)




THANK
YOU