

*“Bumblebees shouldn’t be able
to fly.”*

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With regards to bumblebees, what do you think?

1. They're very cute.
2. As pollinators, they're a valuable indicator of the health or condition of the environment.
3. They have a healthy disdain for the laws of physics.
4. All of the above.

Knowing

The trap and the key.

“To believe what has not occurred in history will not occur at all, is to argue disbelief in the dignity of man.”

Mahatma Gandhi

What did you want to be when
you grew up?

By the end of your life,

- What do you want to have accomplished?
- What impact do you want to have had?
- What difference do you want to have made?

What is important to you right now?

- ❖ Success?
- ❖ Satisfaction?
- ❖ Freedom?
- ❖ Justice?
- ❖ Quality?
- ❖ Passion?
- ❖ Fulfillment?
- ❖ Accountability?
- ❖ Generosity?
- ❖ Appreciation?
- ❖ Dignity?
- ❖ Leadership?
- ❖ Peace?
- ❖ Love?

Did you know

that the best way to fulfilling all of this is through Sustainability?

Why is that?

- There is NOTHING that we do that is separate from our environment.
 - WE are 100% dependent on the environment.
 - Our ECONOMY is 100% dependent on the environment.
 - Our HEALTH & WELL-BEING is 100% dependent on the environment.
- The quality of our environment determines the longevity of our actions.

If you want to know WHY BOTHER
with sustainability, this is why!

Our history as a species

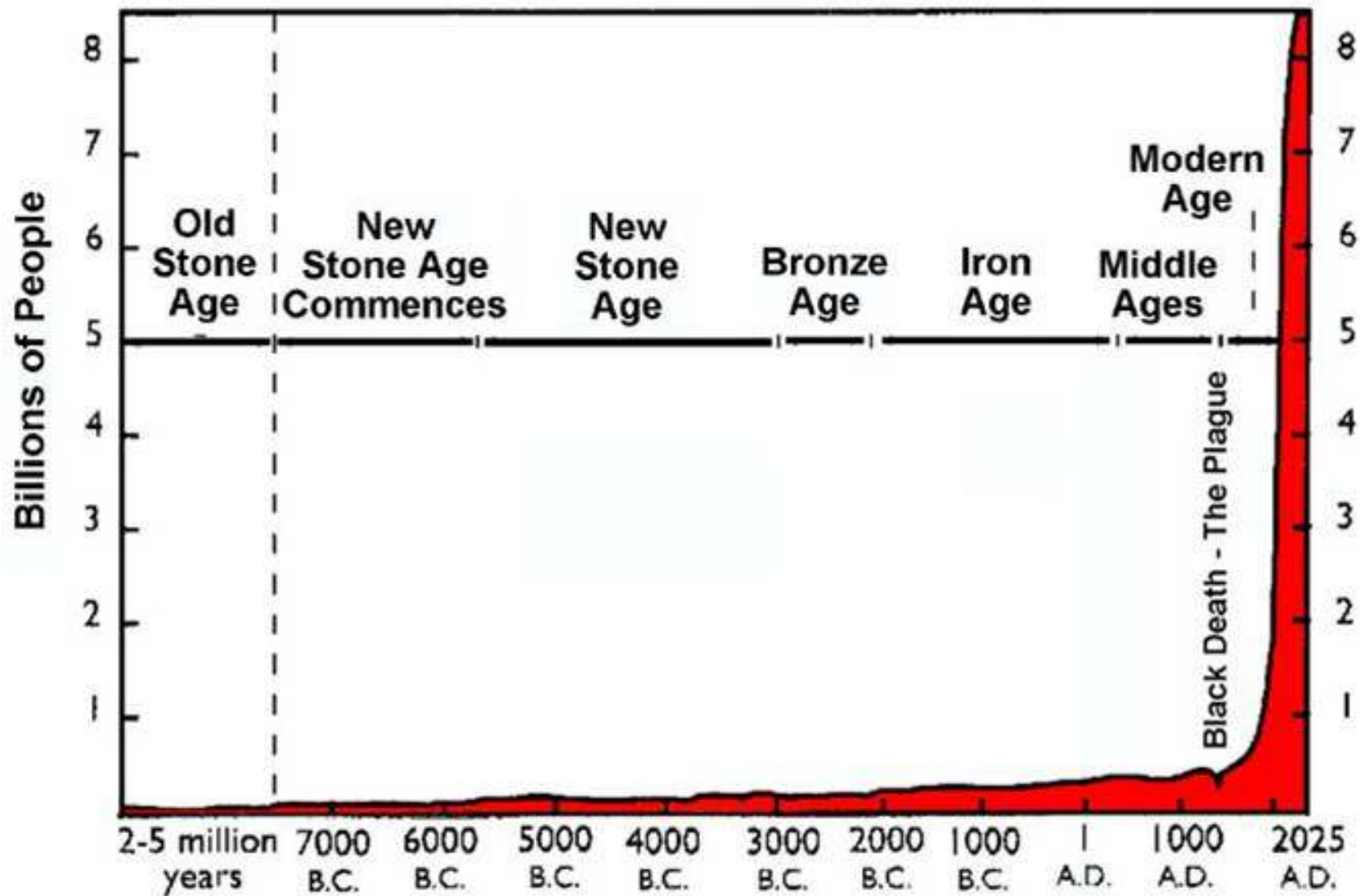
Amazing developments

Amazing successes

Always used resources

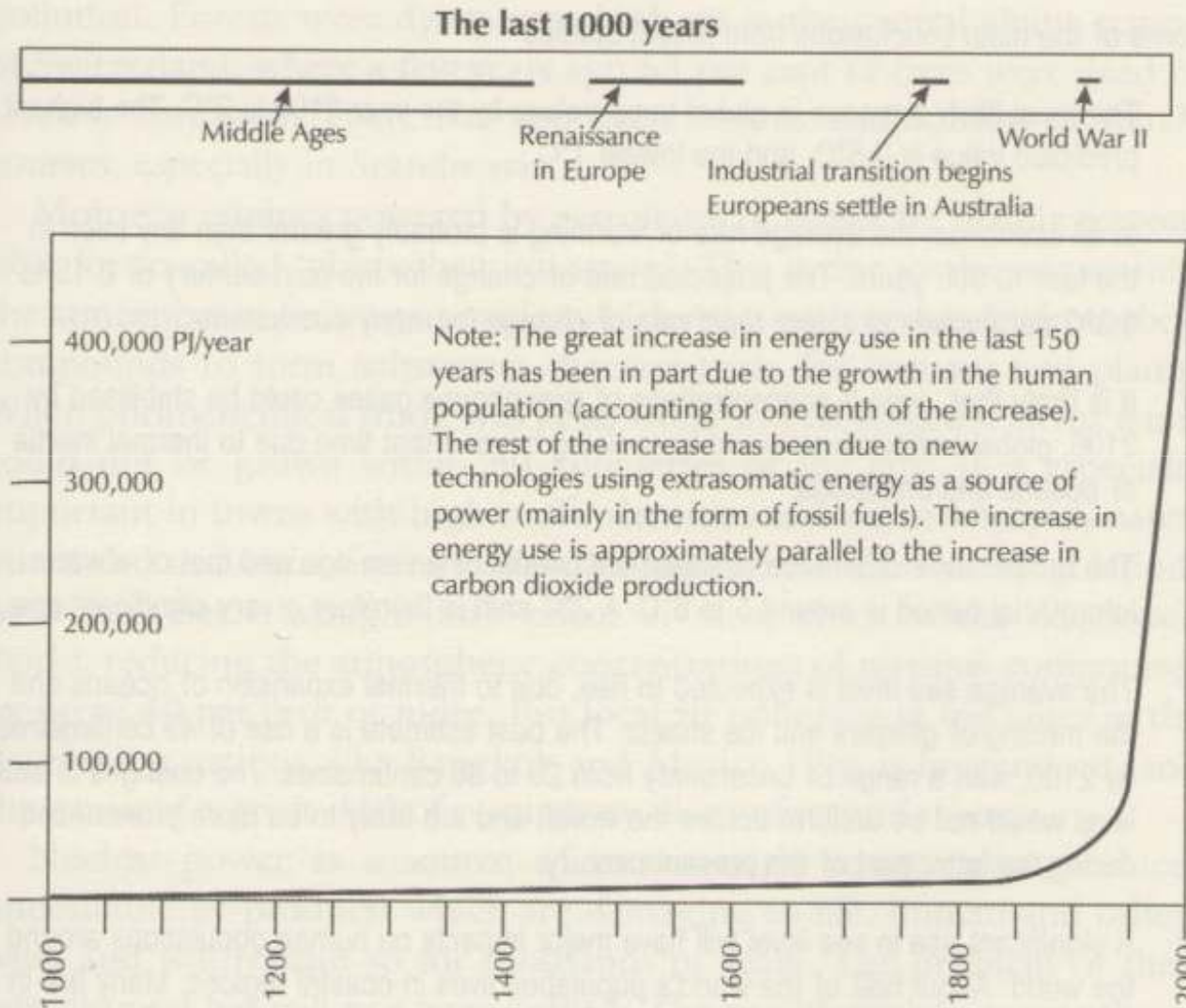
Always produced waste...

World Population Growth Through History



From "World Population: Toward the Next Century," copyright 1994
by the Population Reference Bureau

FIGURE 9.1
ENERGY USE BY THE HUMAN SPECIES



(Boyden, S., 2004. *The biology of civilisation*. p. 133)

There are so many graphs that
show this trend!

We already have

- 20 million more undernourished people than there were in the year 2000,
- 52,000 km² of forest that are lost around the world each year
- 85% of fish populations that are over-exploited or depleted.
- An addiction to fossil fuels that is unsustainable.

(www.un.org)

It is almost certain that

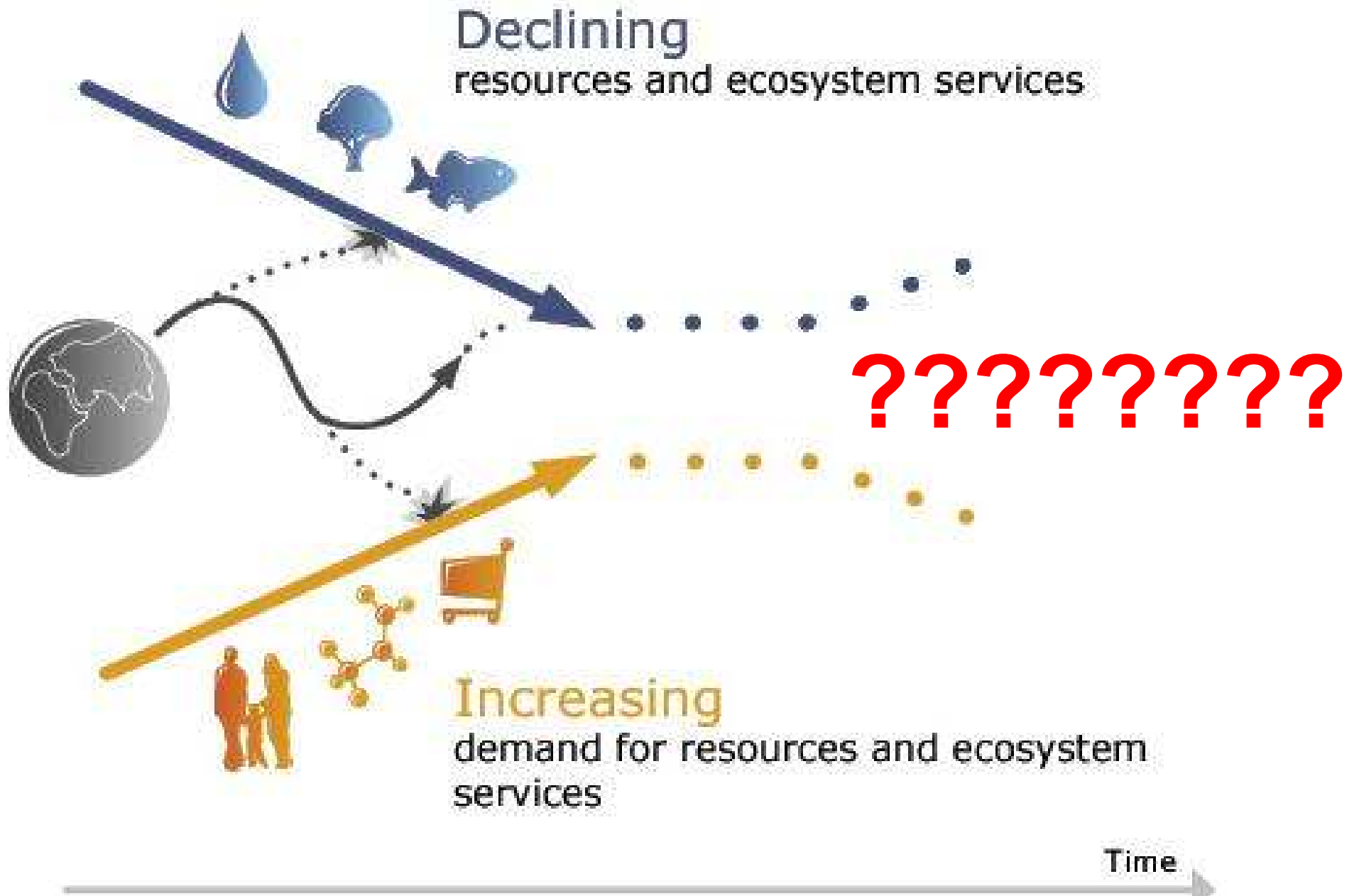
- by 2040, our population is likely to increase from 7 billion now to 9 billion, and even reach 10 billion by 2050,
- the number of middle-class consumers will increase by 3 billion in that time, also increasing the demand for resources and increasing production of waste,
- by 2030, the world will need 50% more food, 45% more energy, and 30% more water.
- Within 40 years there may be no wild fish left.
- We are likely to see the end (or close to it) of fossil fuels in our lifetime.

(www.un.org)

There's a problem with all of this







(The Natural Step, www.naturalstep.org)

It's not just the planet that is being
“wrung out”;

- Natural resources
- Human resources
- Inequality
 - *25% of people using 75% of resources and having 80% of the wealth.*
- Poverty
 - *Did you know that poverty itself is unsustainable?*

The ways we've achieved our successes haven't come for free.

- Reliance on fossil fuels
- Increasing demand for energy
- Increasing demand for physical and human resources
- Pollution
- Greenhouse gases
- Land degradation

Global warming is happening.

- Global temperatures are 0.4-0.7°C warmer than 1860.
- At the current rate of warming, global temperatures could be 3°C warmer;
 - *likely somewhere between 1.4-5.8°C warmer than in 1900, and 6°C warmer at the poles.*
- CO₂ levels are now 380ppm (total 790 GT).
 - *(280 ppm, 586 GT pre-Industrial era)*
- reducing levels of CO₂ emissions by 70% by the year 2050 is needed to prevent significant global warming.

(UN, IPCC)

Our solutions have become the next problems!

- Energy
- Efficiency
- Transport
- Food production...



Sustainability

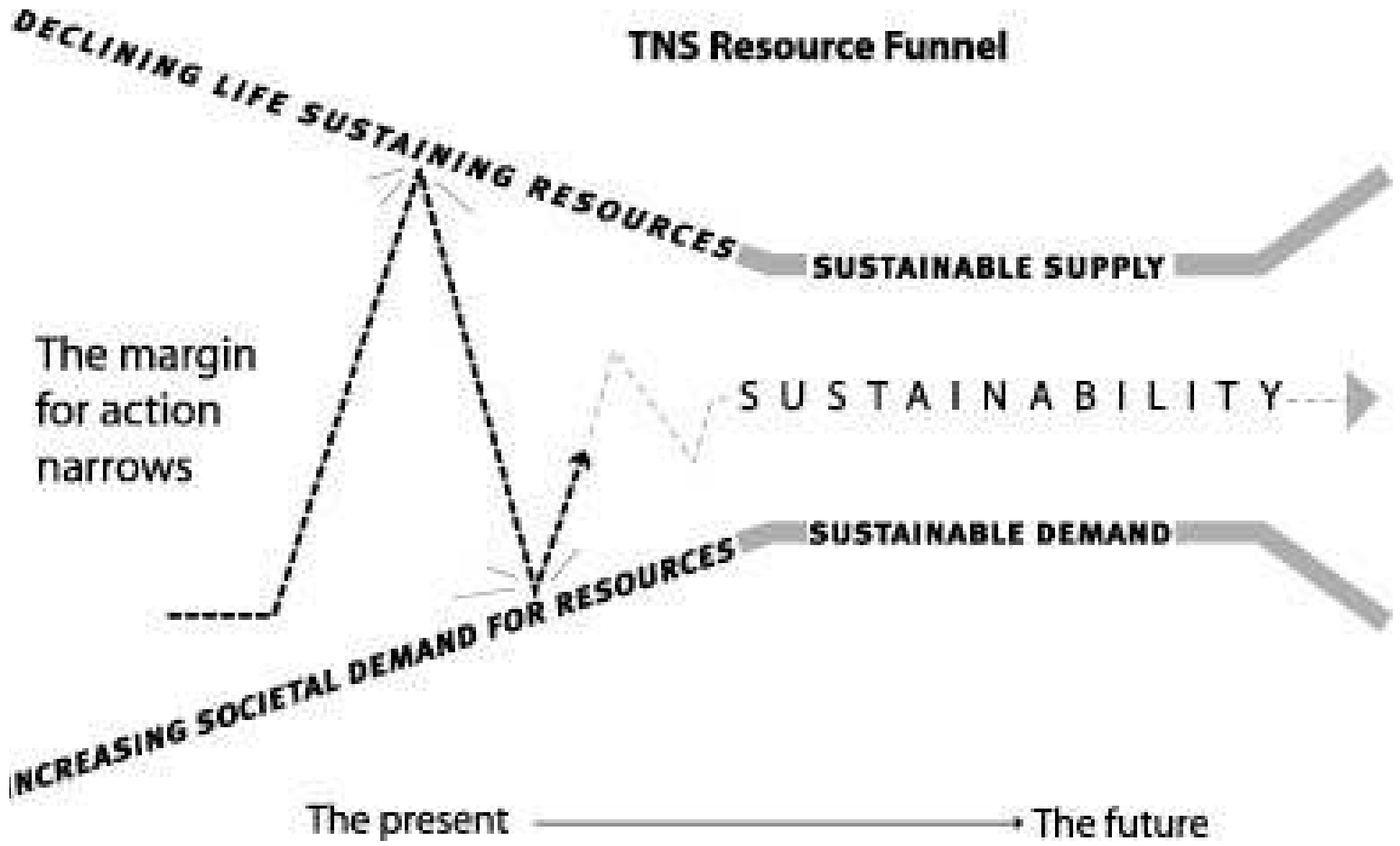
breaks the problem – solution cycle!

Sustainability

“Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”
(Commission for the Future 1987)

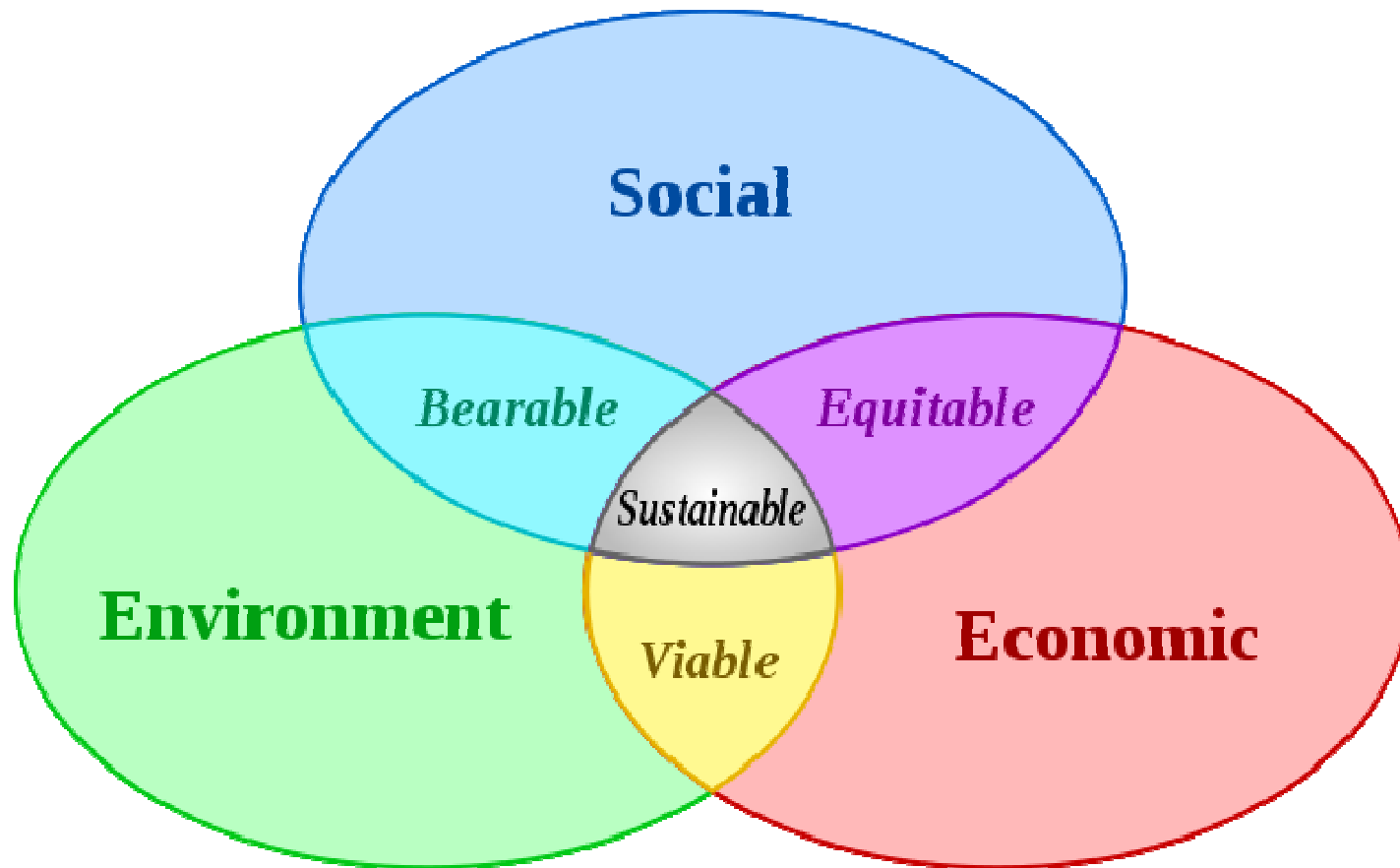
ie. Development / progress that does not damage or destroy the resource base/biosphere, so future generations can develop or maintain a reasonable standard of living.

TNS Resource Funnel



(The Natural Step, www.naturalstep.org)

Triple Bottom Line



Every good “*Why?*” also needs a good
“*How!*”



Dr Karl-Henrik Robert,
Founder of “The Natural Step”

When something is sustainable,

nature is not subjected to :

1. systematically increasing concentrations of substances extracted from Earth's crust,
2. systematically increasing concentrations of substances produced by society, or
3. systematically increasing degradation by physical means.
4. And it must allow that ALL human needs are met world-wide.

(The Natural Step, www.naturalstep.org)







- International non-profit organization dedicated to sustainable re-forestation.
- Main objective is to counter global warming.
- Believe that local communities must have direct benefits from our actions:
 - *train them in understanding the value of growing and protecting diverse forests.*
- Projects empower people to be entrepreneurial
 - *provide them with long term jobs and better living conditions.*



TRINITY COLLEGE

THE UNIVERSITY OF MELBOURNE

- Commitment to sustainability
- Passionate leadership
- Investment
- Partnership
 - Carbon Reduction Institute
- Three themes:
 - Taking responsibility for a sustainable College
 - Educating and inspiring our community to lead
 - Partnering with others

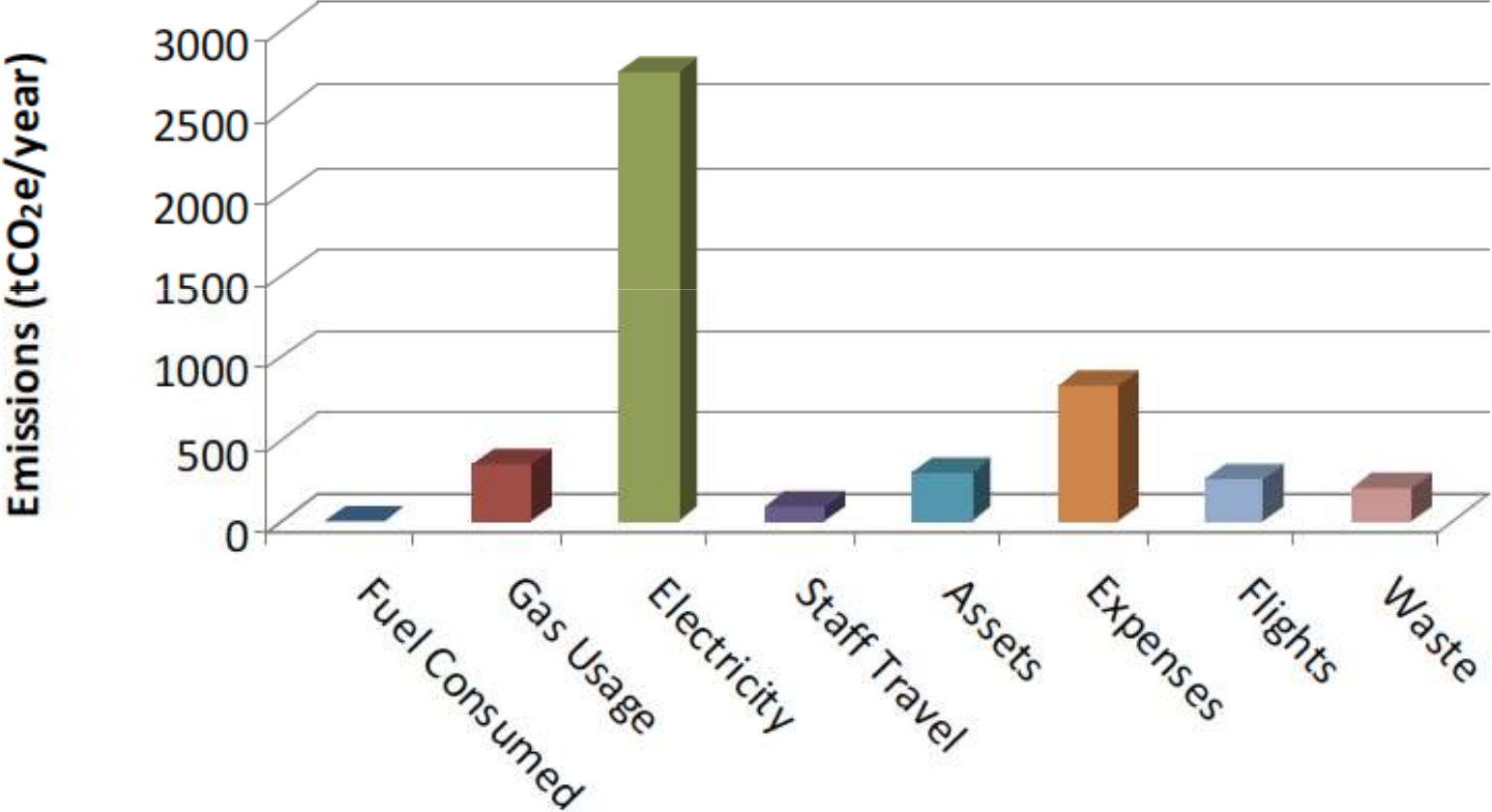


planitgreen

Trinity's Sustainability Projects

- Energy sources
- CO₂ emissions
- *Reduce 50% by 2022*
- Recycling / Waste
- Water
- Purchases

Emissions by Source for Trinity College



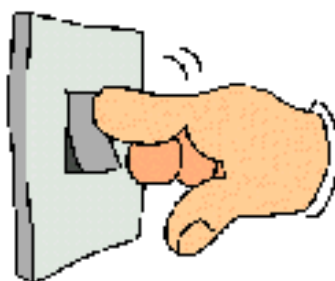
Trinity College's Carbon Footprint

- 4,489 T of CO₂ in 2009
 - *Most from electricity – brown coal!!*
- 7.1 T per person
 - *Above Victoria's Environment Protection Authority benchmark of 4.6 T per person*
 - *(Trinity College Sustainability Plan 2010)*
 - *Above world average of 4 T per person*
 - *Above global requirement to reduce to 1-2 T per person (global average) (www.onetonnelife.com)*



**SAVE
ENERGY**

THIS
MEANS
YOU!





UniMAP as a green campus.



Green Campus

- Green processes
- Green products
- Green education
- Green community

➤ *What ideas do YOU have?*

➤ *Who could you talk with about these ideas?*

*By the way,
if you want to be competitive,
be sustainable!*

Did you know

that unleashing passion,
unleashing creativity,
unleashing intelligence,
unleashing the dignity of the human
spirit,

is what will give you access to
devising, designing and delivering on
these possibilities?

Did you know

that as an educational organisation,

you are in the best position to

innovate

educate

inspire

partner

excellence in the

development of sustainable practice?

“If all you have is a hammer, you treat everything as if it were a nail.”

(Psychologist, Abraham Maslow)

- New thinking?
- New practices?
- New applications?

Sustainability - where do you start?



1. Awareness

Collect the facts – do a sustainability audit.

Ecological / carbon footprint

Processes and products.

Resource use, waste production.

Supply and demand.

Cost

2. Identify critical areas

Energy use

Resource use

Waste production

3. Possibilities for action

Brain-storm your options.

Prioritise.

4. Identify your resources

Human and Natural

What do you have?

What do you need?

Requests?

5. Find the “*bright spots*”



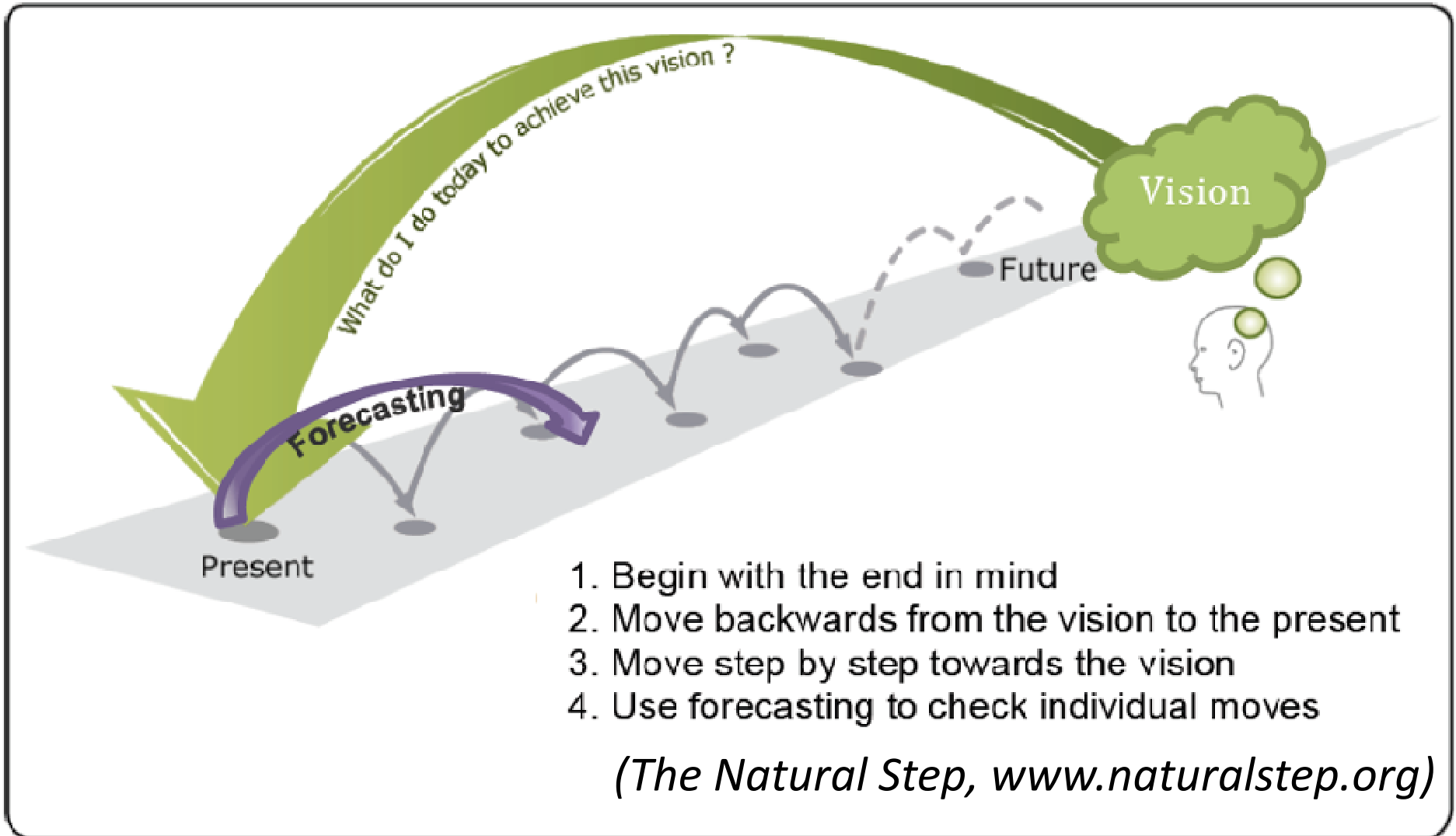
Heath and Heath (2010)

“Switch – how to change things when change is hard”

6. Select your focus – “*pick the low-hanging fruit*”



7. Action Plans – “*back-casting*”



8. Early wins



9. Build momentum



10. *“This is how we do things
around here!”*

The game.
Objectives.
Rules.
Scoring goals.

*Have you noticed,
all of this requires PEOPLE!*

Elements of engagement

1. Intention
2. Connection
3. Invitation
4. Platform for doubt
5. People get to choose
6. Clear expectations
7. Design the outcome together
8. Design the experience together
9. Design the pathway together

Block, P. (2000). *Flawless Consulting*

“Don’t give me problems, give me solutions!”



Teach this to your children

They will keep you honest!

The well-being of a society

Not just economic!

"GNP fails to consider integrity of our environment, health of families, quality of education, it measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country. It measures everything, in short, except that which makes life worthwhile."

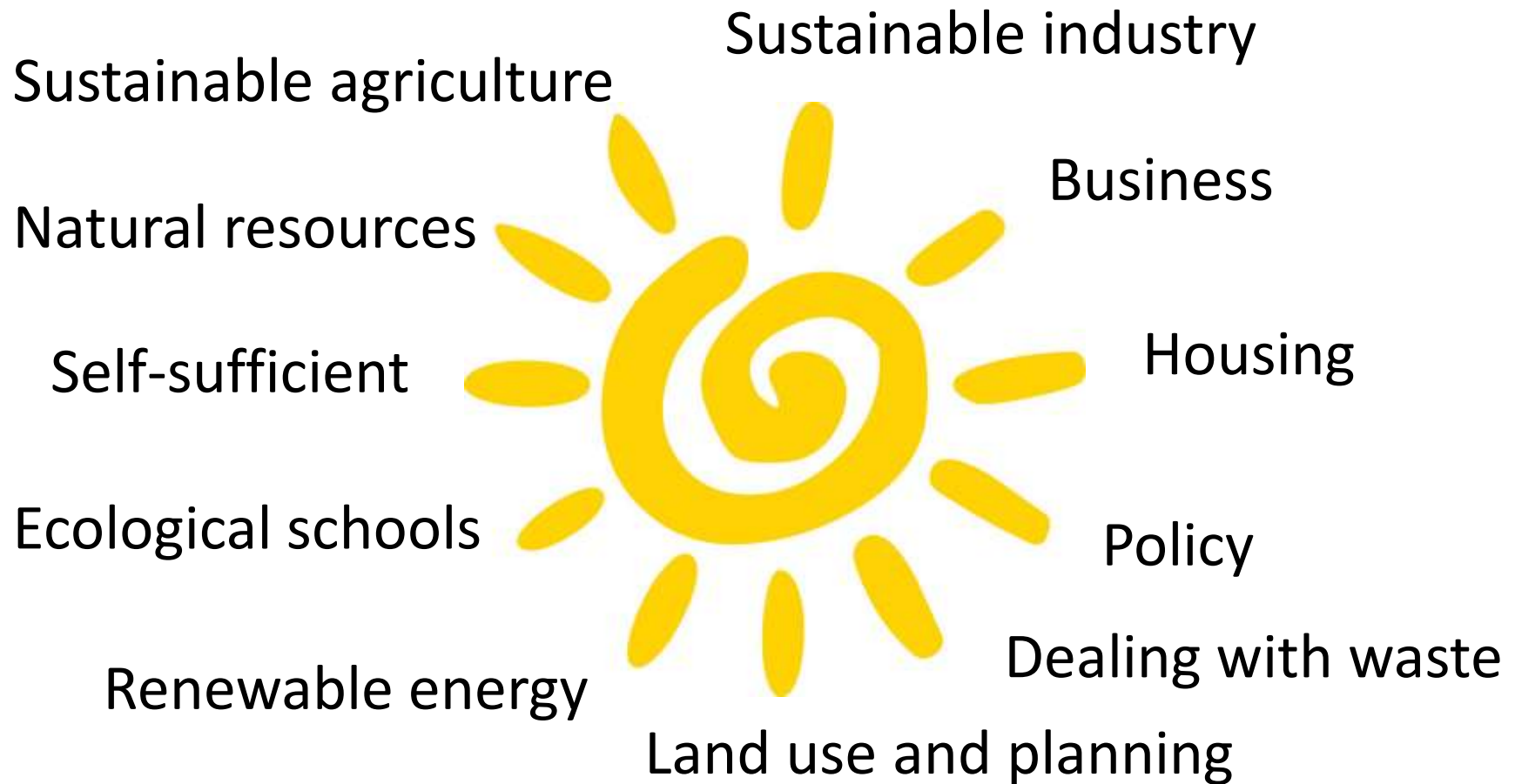
(John F. Kennedy)

Also:

- Health of the environment
- Quality of social relationships
- Creativity
- Spirituality

(Adjunct Professor Mike Salvaris, RMIT University)

What kind of society do you want?



What if Perlis was a “*bright spot*”?





*And what if UniMAP empowered
and enabled this?*



The necessity of leadership

Symbolic,
Political,
Structural,
Human resource.

(Bolman & Deal (2003), Reframing Organisations.)

Good management is essential

It's all based on relationships

Influence requires trust.

The biggest challenge is people!

It's also the biggest opportunity!

What would you have to

- Deal with?
- Resolve?
- Stop tolerating?
- Re-invent?
- Start energizing?

*We don't have to do any of this
sustainability stuff!*

But if we choose not to,
at least choose knowing the impact
of our choice.

Stasis is an illusion.

*If we don't take the path of
sustainability,*

we can expect:

- ◆ Higher cost for resources, energy etc
- ◆ More competition against others who do adjust
- ◆ More legislative limits
- ◆ More waste, cost, inequality to deal with
- ◆ An increasing constriction between supply and demand.

If we do

we have a chance of

- ◆ Secure futures
- ◆ Well-being
- ◆ Sufficiency...

*We already know that bumblebees
shouldn't be able to fly.*



*Ancient wisdom and
contemporary capability.*

Stewardship

Universal Declaration of Human Rights

All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.

*Remember what you wanted to be
when you grew up?*

- ❖ Remember what you wanted to accomplish during your life?
 - ❖ What impact you want to have?
 - ❖ What difference you want to make?
- ❖ Remember what's important to you?
- ❖ Remember, there is no-one on the planet, past, present or future, who will not also have these things.

Remember, there's only one way that these possibilities can be fulfilled.

Sustainability. It's our choice.

What will you choose?

Abstract: “*Bumblebees shouldn’t be able to fly.*”

Sustainability. It’s a global conversation that won’t be going away. This is no fashion or fad that will come and go as the whim takes us. As a species, we are facing challenges that we have never faced before; in climate, in environmental quality, in inequality and injustice, and in economic melt-down. These challenges are largely of our own making. They have many sources at many levels, and some are more responsible for them than others. Success in solving, and resolving these issues will come only through knowledge, partnership, and concerted effort from many sources and many levels. In the end, it will come down to sustainability. In the end, it’s our choice. What will you choose?

Contact details

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One more thing...



CLIMATE SUMMIT

WHAT IF IT'S
A BIG HOAX AND
WE CREATE A BETTER
WORLD FOR NOTHING?

- ENERGY INDEPENDENCE
- PRESERVE RAINFORESTS
- SUSTAINABILITY
- GREEN JOBS
- LIVABLE CITIES
- RENEWABLES
- CLEAN WATER, AIR
- HEALTHY CHILDREN
- etc. etc.



YOUNG
PETER
WITH US TODAY