Financing the Green Economy
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By

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Disclaimer

The author is a Research Specialist in the Ministry of Planning, Housing and the Environment, Government of Trinidad and Tobago. Since 1991, he has been a consultant in the private sector on a number of Planning Studies, Environmental Impact Assessments and Social Impact Assessments. The comments and views of this paper and presentation are entirely those of the author and are not necessarily that of the Ministry of Planning, Housing and the Environment or of the Statutory Approval.
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- Key Issues
- Narrowing the Gap
- Financing the Transition & beyond
Key Issues & Recommendation
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- Not discounting Carbon Trading
Key Issues & Recommendation

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- Alternative modes of financing- decoupling support for Carbon based development & less green development
Key Issues & Recommendation

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- Do not underestimate role of Governance
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- Reengineering Institutions and laws that support Greener Economy
Key Issues & Recommendation

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- Do not underestimate role of Governance
- Reengineering Institutions and laws that support Greener Economy
- Change in Public Policy
Key Issues & Recommendation
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- Transition to Green Economy can be Financed entirely from the market place
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- Economic Development linked with Urbanization and Urban Living
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- More Urbanized World, Cities and Urban areas are where most of the demand for goods and services will be generated.
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- Economic Development linked with Urbanization and Urban Living
- More Urbanized World, Cities and Urban areas are where most of the demand for goods and services will be generated
- Greater Urbanization, more dependent on
Key Issues & Recommendation
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- The transformation has to be self-financing, sustainable
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- Much of transformation will occur in urban areas - urban population (transition drivers)
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- Much of transformation will occur in urban areas - urban population (transition drivers)
- Change in attitudes and consumption patterns
- New demand for services and products
- Everyone talking about the environment
Key Issues & Recommendation
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- The green products are not necessarily “new products”
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- Product- bundle of attributes
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- New attributes- lower energy input, use renewable energy, recycled products, lower GHG inputs- food preparation
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- Product- bundle of attributes
- New attributes- lower energy input, use renewable energy, recycled products, lower GHG inputs- food preparation
- Real environmental & other costs across entire production / supply chain
Key Issues & Recommendation
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- Basic Needs – easiest starting point
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- More relevant to most of worlds urban population- makes a big difference to livability
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- Not really looking at exotic items here like more efficient computers and devices - “no frills issue”
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- Clean Water
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- Sanitation & Solid Waste
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- Food
Key Issues & Recommendations, an example
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- Food - along the entire chain & LCA
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  - Where grown - cost of land
Key Issues & Recommendations, an example

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  - Technology that reduces inputs overall
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    - type of irrigation
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  - Source of water- recycled vs pristine water
Key Issues & Recommendations, an example

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Key Issues & Recommendations, an example

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  - Technology that reduces inputs overall
  - Water input
    - type of irrigation
    - Availability of water
    - Source of water - recycled vs pristine water
    - Cost of water
  - GHG input e.g. - transportation, preparation
Transition Drivers
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- Global Economic Development has left serious environmental issues to be addressed - imperfect markets
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- Global Finance has supported carbon based economies
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- The implications of carbon based economies not internalized
Transition Drivers

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- Global Finance has supported carbon based economies
- The implications of carbon based economies not internalized-
- Other environmental issues not received
Transition Drivers
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- Aware of problems of deforestation
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- Plastic waste in oceans
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- GHG emissions
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- Climate change- sea level rise
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- Plastic waste in oceans
- GHG emissions
- High cost of energy - fossil fuels (recent)
- Erratic weather patterns
- Climate change - sea level rise
- All linked to Development and Urbanization, not just industry
Current Situation
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- Food, clean water and clean air under-valued and underpriced
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- High energy, High carbon inputs-construction materials undervalued and underpriced
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- Cheap Fossil fuel (oil, natural gas, coal)
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- Environmental cost - production chain?
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- Do not reflect environmental value inputs
Current Situation
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- Climate change, but other environmental issues facing humanity gone largely unaddressed—“no frills” basic needs
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- Current development and consumption patterns have much at stake
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- Existing investment has an interest in maintaining status quo
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- Still pursuing cheap oil, gas and coal
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- Climate change, but other environmental issues facing humanity gone largely unaddressed—“no frills” basic needs
- Current development and consumption patterns have much at stake
- Existing investment has an interest in maintaining status quo
- Still pursuing cheap oil, gas and coal
- Less reliant on imported fossil fuel
Current Discussion
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- Need to be more environmentally responsible - dwindling water supplies
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- Worked well in addressing ozone depletion, acid rain, cites - ivory, movement of radioactive waste. Now climate change
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- Economic Development poorly defined unless embrace a Greener Economy
- No consensus on how to Finance the
Seriousness of Global Problems: Top problems (‘very’)

- Extreme poverty: 71%
- Environment/pollution: 64%
- Rising cost of energy/food: 63%
- Spread of human disease: 59%
- Terrorism: 59%
- Climate Change: 58%
- Human rights abuse: 58%
- State of the Global economy: 58%
- War/armed conflict: 57%
- Violation of workers' rights: 48%
- Power of Global Companies: 36%
- Religious Fundamentalism: 34%
- Transnational migration: 28%
Key Assumptions
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- Change in attitude
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- Change in attitude
- Change in consumption pattern
Key Assumptions

- Change in attitude
- Change in consumption pattern
- Change in demand
Key Assumptions

- Change in attitude
- Change in consumption pattern
- Change in demand
- More urbanization
Key Assumptions

- Change in attitude
- Change in consumption pattern
- Change in demand
- More urbanization
- Smarter urbanization and smarter & safer buildings – UN Habitat source of problems
Key Assumptions

- Change in attitude
- Change in consumption pattern
- Change in demand
- More urbanization
- Smarter urbanization and smarter & safer buildings – UN Habitat source of problems
- Need for strong environmental laws and penalties
Key Assumptions
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- Change occurring in Urban areas
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- Valuation must reflect true green or environmental inputs
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- Environmental laws and penalties influence prices and values
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- Prices = willingness to pay (for a characteristic of product-greener product)
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- Valuation must reflect true green or environmental inputs
- Environmental laws and penalties influence prices and values
- Prices = willingness to pay (for a characteristic of product - greener product)
- Market Demand - willingness to pay
Key Issues

Environmental Issues / problems and the priorities not the same - depends where you are
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- Need more support for basic need issues
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- Basic Needs - sanitation and potable water
- Type of goods - public goods
Key Issues
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- Require public infrastructure investment
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- High Value from green valuation, low price
Key Issues

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- Market responds to prices
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- Cheap fossil fuel / energy in public interest
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- High Value from green valuation, low price
- Market responds to prices
- Imperfect markets - government intervention
- Cheap fossil fuel / energy in public interest
- Eliminate subsidies to fossil fuel, transfer these to renewable energy
Narrowing the Gap
Narrowing the Gap

- Turning the problem into an opportunity
Narrowing the Gap

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- Importance of Good Governance
Narrowing the Gap

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- Look for changes in pricing that are emerging-refrigerants worked well
Narrowing the Gap

- **Turning the problem into an opportunity**
- **Importance of Good Governance**
- **Look for changes in pricing that are emerging-refrigerants worked well**
- **Not an issue facing only Third World cities**
Narrowing the Gap

- Turning the problem into an opportunity
- Importance of Good Governance
- Look for changes in pricing that are emerging - refrigerants worked well
- Not an issue facing only Third World cities
- NYC - sewage – CSOs in East River - still occurring, no consensus how to address the issue – but public largely unaware!
Narrowing the Gap
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- Over 6Bn people, over 3Bn without toilets
Narrowing the Gap

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- Now urban issue!!!
Narrowing the Gap

- Over 6Bn people, over 3Bn without toilets
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- Changing attitudes & lifestyles, potential new demand for sanitation services
Narrowing the Gap

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- Changing attitudes & lifestyles, potential new demand for sanitation services
  - Curb pollution that affect clean water supplies and food
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Narrows the Gap

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- Now urban issue!!!
- Changing attitudes & lifestyles, potential new demand for sanitation services
  - Curb pollution that affect clean water supplies and food
  - Cleaner living environment
  - Open spaces transformed
How to Finance the Transition
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- Meeting the needs of low income not a priority- invisible people (>3Bn)
How to Finance the Transition

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If made a priority/ responsibility then there is opportunity cost of doing nothing
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- Governance issues is key
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- Property rights= reshaping this to reflect environmental entitlements
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- If made a priority/ responsibility then there is opportunity cost of doing nothing
- Governance issues is key
- Property rights= reshaping this to reflect environmental entitlements
- Air pollution and water pollution laws- penalties, legal requirement to address
How to Finance this Transition
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- Part of physical planning standards
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- Standards must be relevant
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  - Too much focus on planning for cars
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- Infrastructure costs can be as high as ½ of total “housing cost” for detached housing
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- Infrastructure costs can be as high as \( \frac{1}{2} \) of total “housing cost” for detached housing
- More high density housing - less costly
How to Finance this Transition

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- Standards must be relevant
  - Too much focus on planning for cars
  - Power lines under ground
- Infrastructure costs can be as high as $\frac{1}{2}$ of total “housing cost” for detached housing
- More high density housing - less costly
- Tremendous saving potential - more viable
How to Finance the Transition
How to Finance the Transition

- Different approaches to physical planning
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- Different approaches to physical planning
- Focus on making cities and urban areas more efficient
How to Finance the Transition

- Different approaches to physical planning
- Focus on making cities and urban areas more efficient
- Make cities and urban areas more livable
How to Finance the Transition

- Different approaches to physical planning
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- Infrastructure development needed
How to Finance the Transition

- Different approaches to physical planning
- Focus on making cities and urban areas more efficient
- Make cities and urban areas more livable
- Infrastructure development needed
- Avoid the costly mistakes when environmental values are not incorporated in decision making
Bon Air North Squatter site
Bon Air North Squatter site
Squatting in Forested areas close to Urban centres
Bon Air North Squatter Site
Bon Air North Squatter Site
Road construction
Bon Air North Squatter Site
Bon Air North Squatter Site
Road and sewerage infrastructure
How to Finance this Transition
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- Trinidad & Tobago - 0.1% on Gross Revenue - from market - for Green Fund
How to Finance this Transition

- Trinidad & Tobago - 0.1% on Gross Revenue - from market - for Green Fund
  - But funds not used to mitigate these issues
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  - Opportunity to raise large amounts of revenue
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- Do not exempt companies with tax holidays from environmental taxes
How to Finance this Transition

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  - But funds not used to mitigate these issues
  - Opportunity to raise large amounts of revenue

- Do not exempt companies with tax holidays from environmental taxes

- Support technologies that reduce the cost of going green to make green positive,
How to Finance the Transition
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- Public infrastructure funding from IDB / WB etc loans at zero interest rates
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  - Bailout financial systems - Need to bailout all of us, Environment is Global Commons Issue as well
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- SDRs (IMF) from Financial Markets - Soros
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  - Bailout financial systems- Need to bailout all of us, Environment is Global Commons Issue as well
- SDRs (IMF) from Financial Markets- Soros
- Operation and maintenance from user fees, property taxes- occupiers.
How to Finance the Transition
How to Finance the Transition

- Exploit economies of scale in food preparation - improve urban feeding systems
How to Finance the Transition

- Exploit economies of scale in food preparation - improve urban feeding systems
- More efficient mass & other transportation systems
How to Finance the Transition

- Exploit economies of scale in food preparation – improve urban feeding systems
- More efficient mass & other transportation systems
- Government role in housing – more important in urban context (not sprawl or squatting) Lesson of Haiti here
How to Finance the Transition
How to Finance the Transition

- Reiterate infrastructure development reduces cost of housing services & basic needs
How to Finance the Transition

- Reiterate infrastructure development reduces cost of housing services & basic needs
- Finance Maintenance from user fees
How to Finance the Transition

- Reiterate infrastructure development reduces cost of housing services & basic needs
- Finance Maintenance from user fees
- Bottom line is these can be financed from the market place
How to Finance the Transition

- Reiterate infrastructure development reduces cost of housing services & basic needs
- Finance Maintenance from user fees
- Bottom line is these can be financed from the market place
- Important role of government, especially in eliminating subsidies that support
Cumulative Impact Assessment
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- Need to start doing things differently
Cumulative Impact Assessment

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  - Not just identify issues, but suggest ways of financing and legislation for meaningful assessment & public consultation
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- Since Commons issue – use cross border scenarios where laws are absent or weak
Cumulative Impact Assessment

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- Since Commons issue – use cross border scenarios where laws are absent or weak

- Valuation and Pricing, often ignored, need to be looked at very closely
Thank you