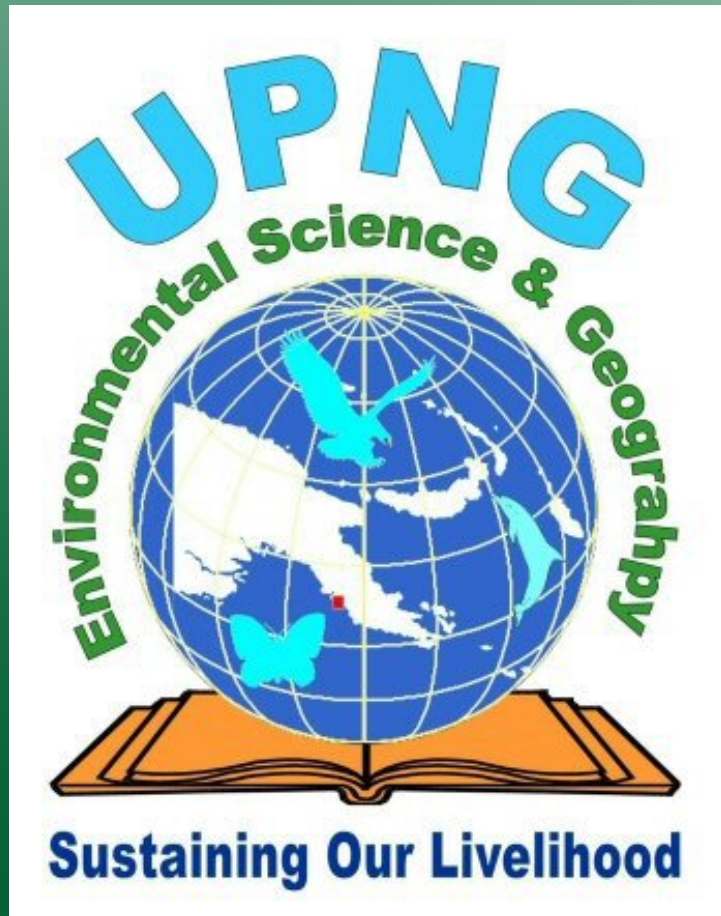
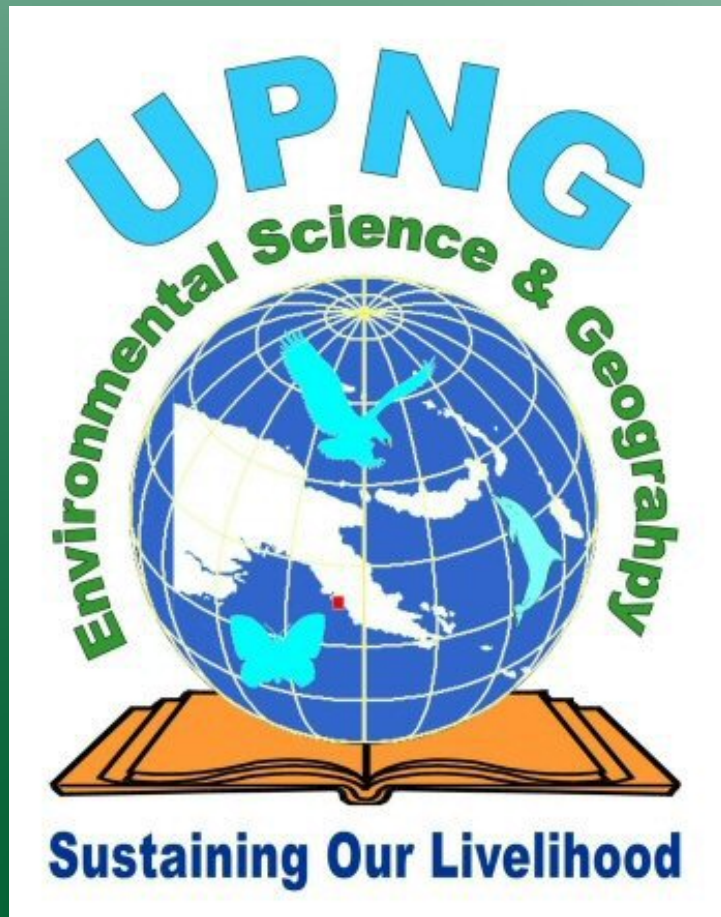


# *Bachelor of Sustainable Development*



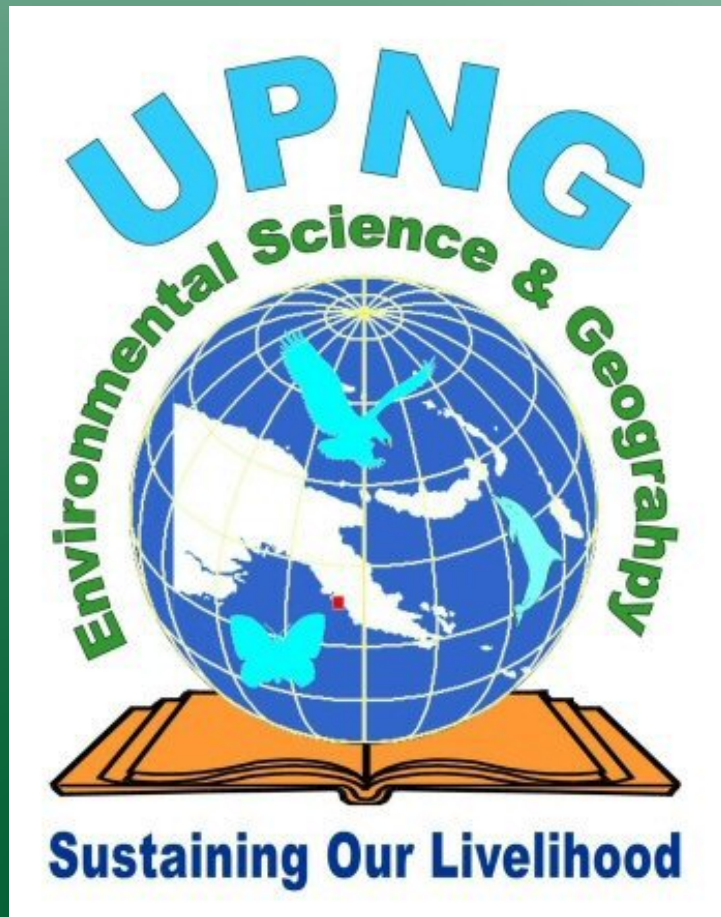
- Co-ordinated by ESG programme in SNPS
- Hopefully in 2016 to include SBA & SHSS
- As a 4 year undergraduate or 2 year second degree
- Commencing 2015

# *Bachelor of Sustainable Development*



- 1975 PNG has environmental and sustainability concerns in her Constitution
- In 1993 Waigani Seminar on Environment & Development: From Rio to Rai / Stretim Nau Bilong Tumora (or Ita Hanamoa Kerukeru Totona) - first PNG NSDS
- In 2009 got Vision 2050
- In 2000-10-12-14 now have PNG MDGs / now also SDGs
- In 2015 got the Strategy (PNG RSDS): From Rio to Rai to ESD/RSD to ples (second PNG NSDS)

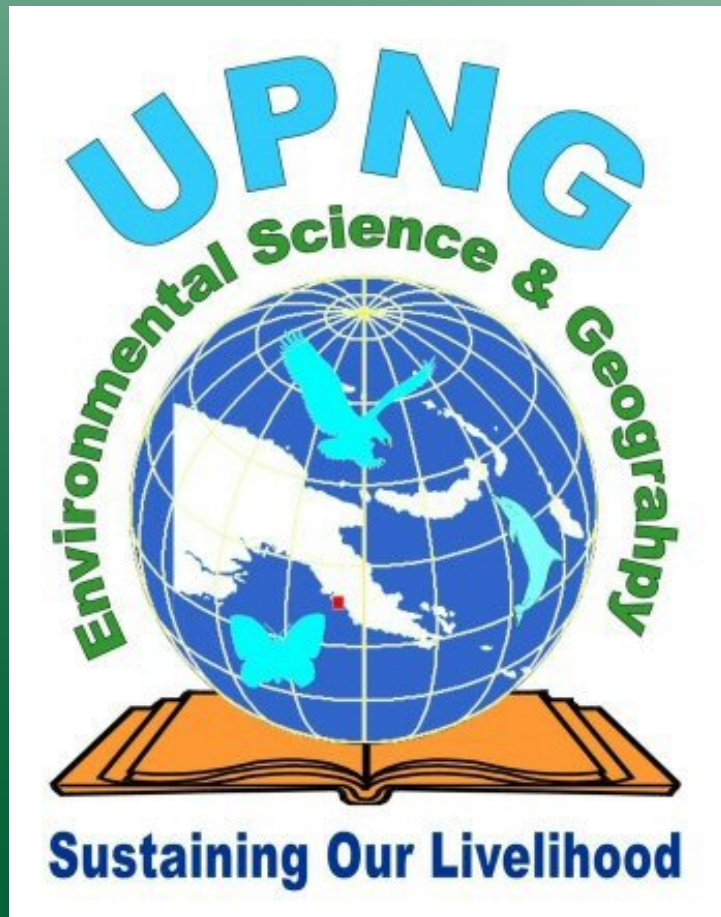
# *Bachelor of Sustainable Development*



- Education for sustainable development is an essential ingredient. It helps us understand and address the needs for change, encourages changes in our attitudes and behaviour and gives us the knowledge and skills to effect that change

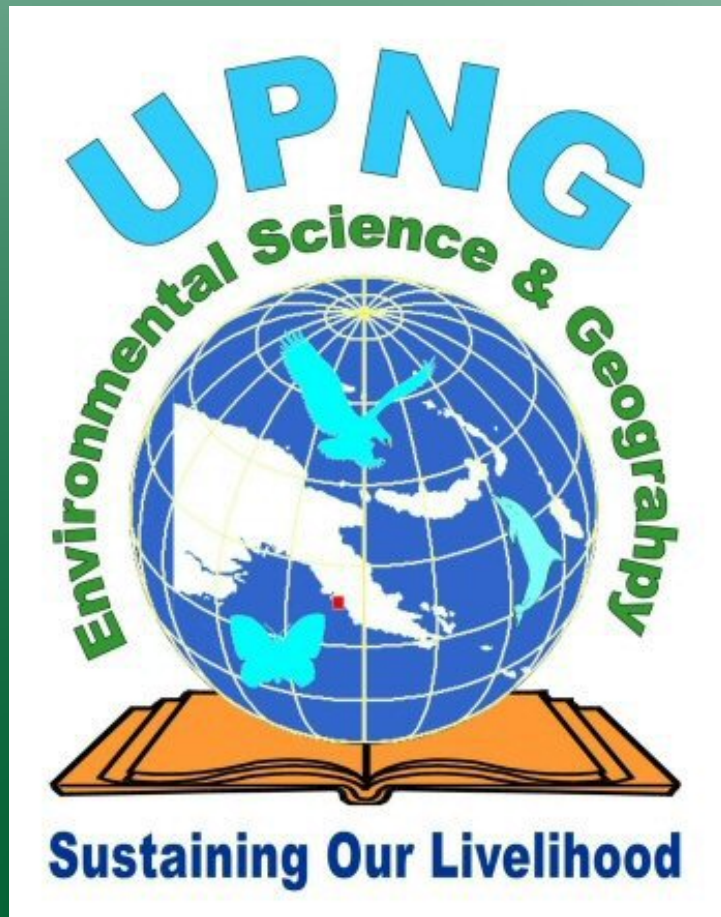


# *Bachelor of Sustainable Development*



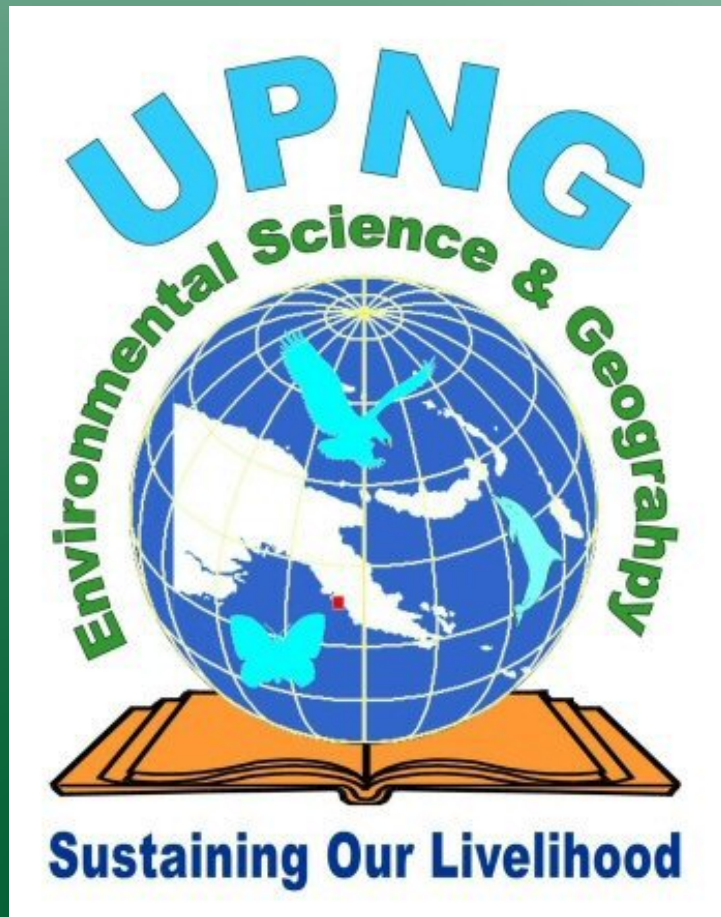
- Education for sustainable development and measuring such indicators of wellbeing and sustainability will have an impact on consciousness that inform development thought and action
- I hate the word "progress". It has many awful & incorrect connotations!!

# *Bachelor of Sustainable Development*

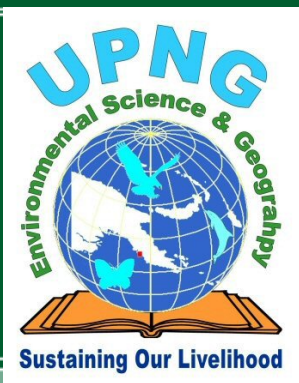


- UPNG / ESG's response to The Strategy is to be part of that process; to run a Bachelor of Sustainable Development
- To foster Charles Abel's new paradigm of **green development** / to join his "development revolution"
- To move out of our "comfort zone" and look for a new way / a PNG way.

# *Bachelor of Sustainable Development*



- At UPNG / ESG
- Students will seek a new vision and new tools to become active participants along the new road ...
- .... to sustainability and real sustainable development.
- They will be trained to be catalysts and implementers for change
- They will be trained to use a wide range of sustainability indicators



## Conference title

*Resource Development and Human Well-being in PNG – Issues in the Measurement of Progress*

Problem of measurement of **progress** made in the achievement of ‘sustainable human development’

Especially use HDI & MDGs (little emphasis in SHD on environment)/ & by companies in local areas – what do they measure?

Too little emphasis in Sustainable Human Development to including key indicators for the environment that sustains our well-being thru ecosystem services and / of which we are a member

In adequately measuring **sustainable human development** must use consideration of **sustainability** measures /indicators

social = **smart, wise, fair /equitable,**

**happy society, spiritual / /**

**cultural**

**healthy ALL IN VISION 2050**

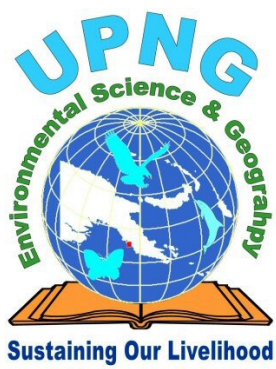
economic= **livelihoods ; definitely NOT wealth /prosperity / GDP / GNP**

environ/ecological = **many eg SOER/SEA PSR..., ecosystem services ecological sustainability**

Institutional = **good governance**

**services**





# *Bachelor of Sustainable Development*

**Sustainability may be the most important word in our language, and also the most misused**

**Sustainable Development  
is an oxymoron**

**The study of sustainable development focuses on fostering the transition to a sustainable future for PNG**

**... involving**

**... process which aims to create an ecologically and economically sustainable and socially equitable society**

**and .....**

**Improving the quality of life / human well-being within the carrying capacity of supporting ecosystems & maintaining ecosystem services**



# *Bachelor of Sustainable Development*

**Sustainable Development  
is an oxymoron**

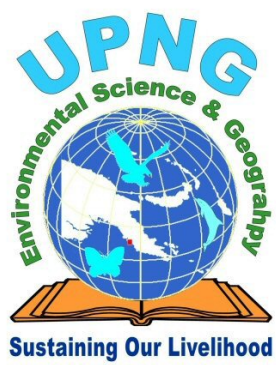
**We can debate this**

**Sustainable economic growth  
is also an oxymoron**

**There is no debate – there is  
no such thing**

**The Earth has biological limits /  
ecological constraints**

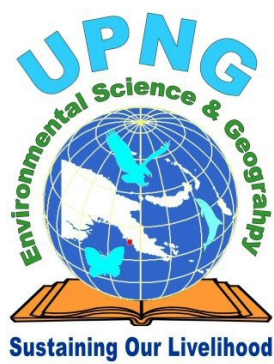
At present humans' ecological footprint exceeds the Earth's carrying capacity by 1.5-1.7 times; by 2050 by 2 times – we NOW consume 1.7 Earths. This is clearly **UNSUSTAINABLE** due to economic growth and too many people and too much consumption. The idea of continuous (so called sustainable) economic growth is based on a false assumption. This is what environmental scientists and ecologists have been saying for years!!



# *Bachelor of Sustainable Development*

**The study of Sustainable Development seems to have the potential to unlock the doors separating disciplines, and to break down the barriers between academic knowledge and action**

**Sustainable Development provides just what the world needs most now – a viable alternative way that both celebrates the full spectrum of human potential and accepts the biophysical and ecological realities / limits within which the human animal must function**



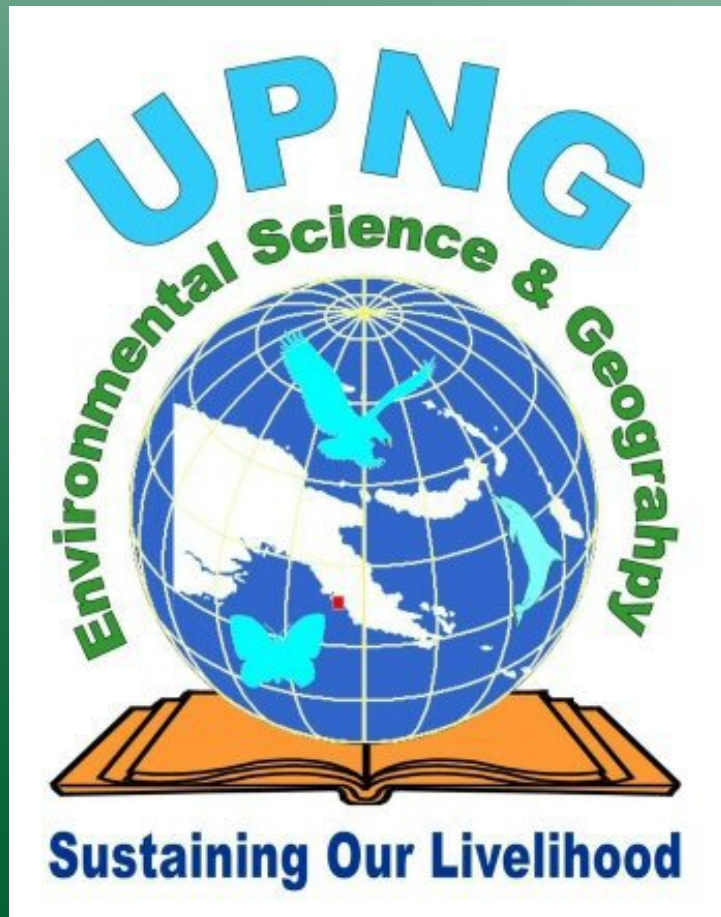
# *Bachelor of Sustainable Development*

**Sustainable Development and Sustainability mean different things to people across different disciplines (eg environmental scientists and conventional economists; industrialists and environmental / conservation activists)..**

**Students will be exposed to these many varied definitions and interpretations. Students will relate ideas on sustainability to world views. What is strong and what is weak sustainability will be discussed and how it affects the development strategy and ensuring sustainability.**

During the program students will redefine Sustainable Development in our own PNG way

# *Bachelor of Sustainable Development*

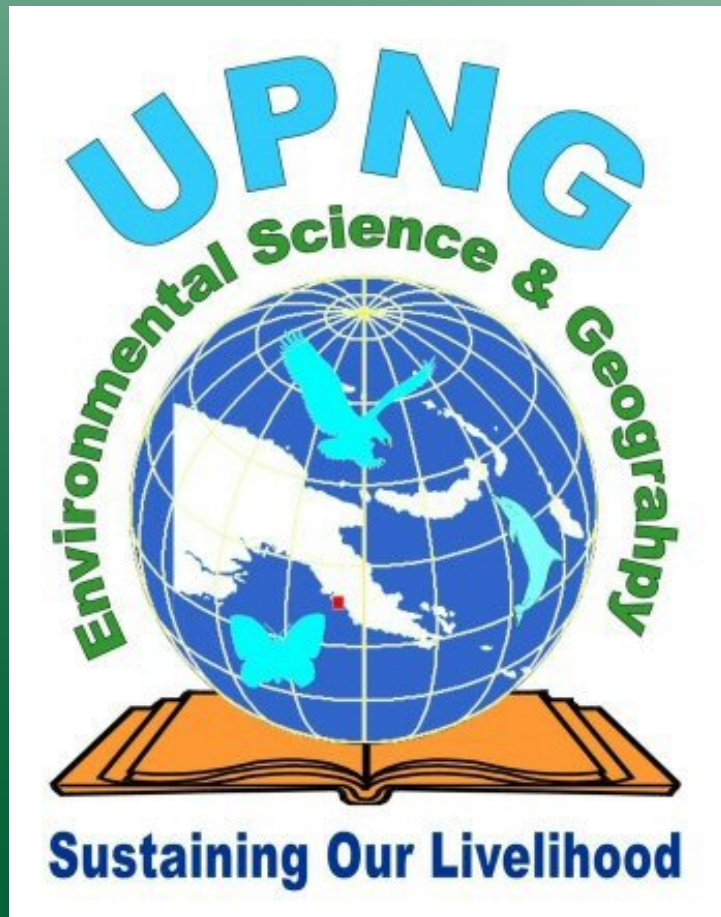


## OUR RESPONSE

- Year 1 SFY
  - (in 2016 AFY / FYBA)
- Year 2 8 courses include
  - Introduction to SD
  - Planning for SD
  - SD Law

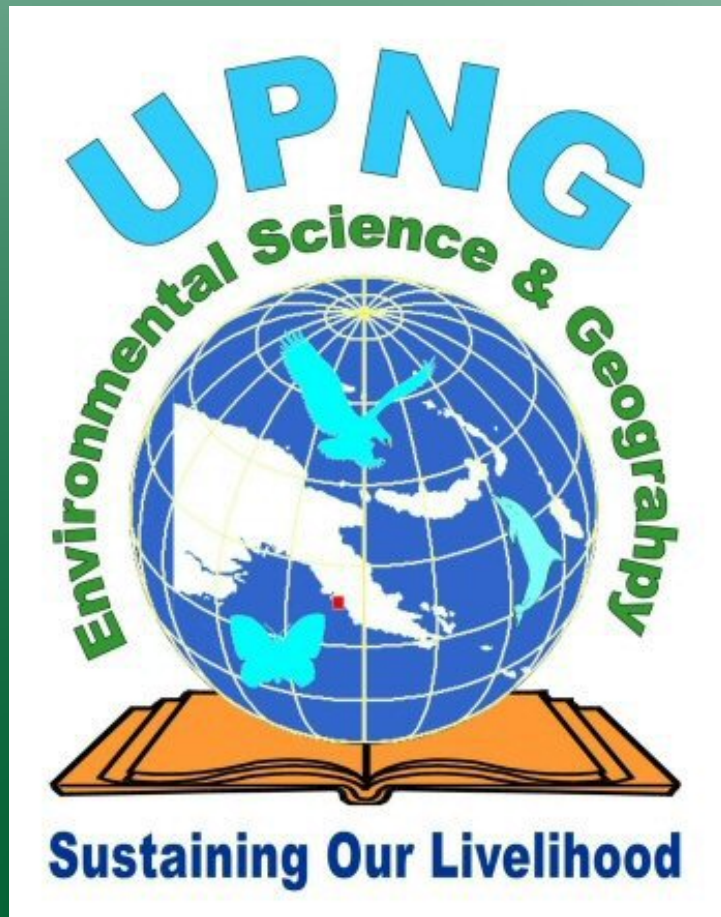


# *Bachelor of Sustainable Development*



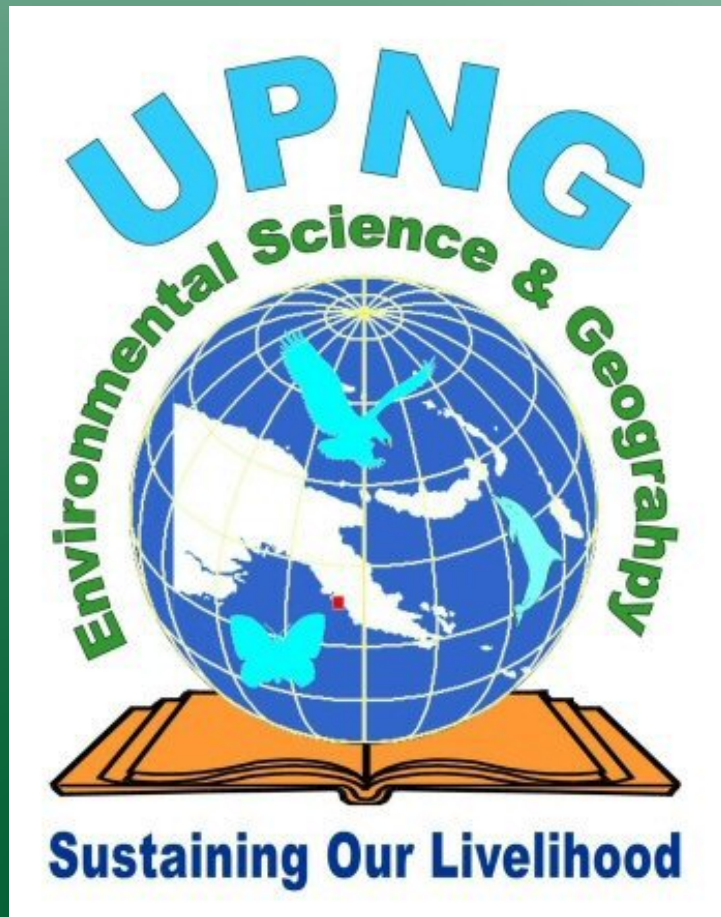
- Year 3 8 courses include
- Principles of Green Engineering and Cleaner Production
- Sustainable Urban Built Environment
- Service Improvement Principles & Techniques
- **LAHARA**
- Sustainable Development Project / Work Experience

# *Bachelor of Sustainable Development*



- Year 4 7 courses incl a double
- Research Techniques & Skills
- Special Topics in Sustainable Development (double points)

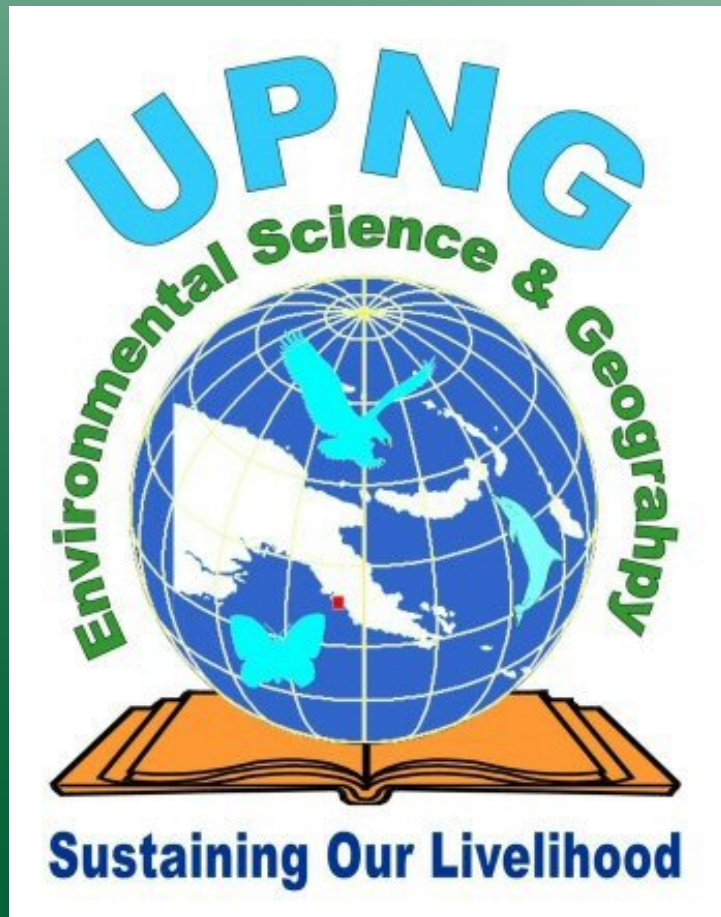
# *Bachelor of Sustainable Development*



- Year 3 or 4
- 2 possible new courses
- Green economics
  - ( environmental economics
  - ecological economics
  - environmental accounting/ valuation of ecosystem services
  - green growth theories / strategies
  - economic instruments for sustainability
  - strategic environmental assessment )
- (my recommendation but favourably received)



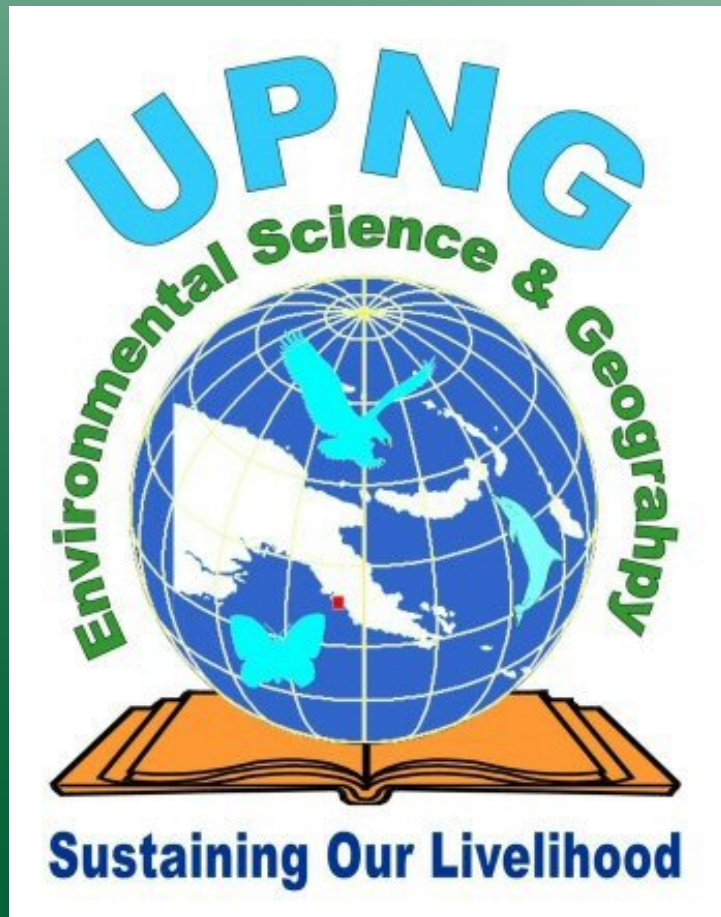
# *Bachelor of Sustainable Development*



- Year 3 or 4
- 2 possible new courses
- Project Management for Sustainable Development
  - Linking project cycle to sustainability considerations and using sustainability /ESD criteria indicators to measure / monitoring the process
  - My proposal

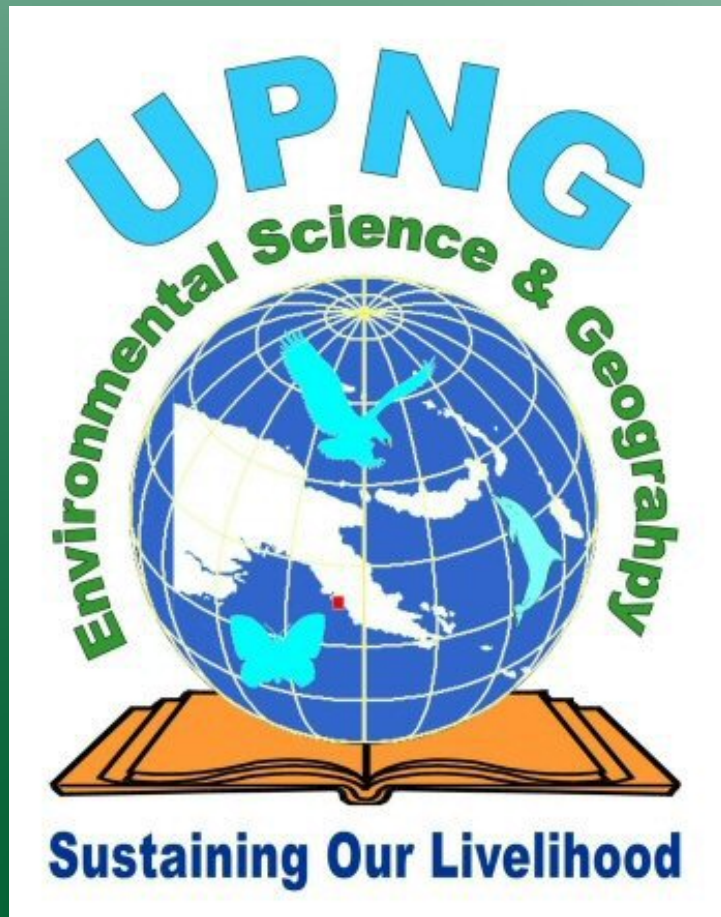


# *Bachelor of Sustainable Development*



- This is our response in SNPS at UPNG
- Credit must go to Prof Chalapan Kaluwin and his great team in ESG; in particular Walhos Palisa
- I am proud to be part of that team.
- Credit must also go to Minister Charles Abel and members of the Department of National Planning and Monitoring.....
- The Strategy is a radical document and the best I believed produced by PNG Government and far better than any produced eg in Australia.

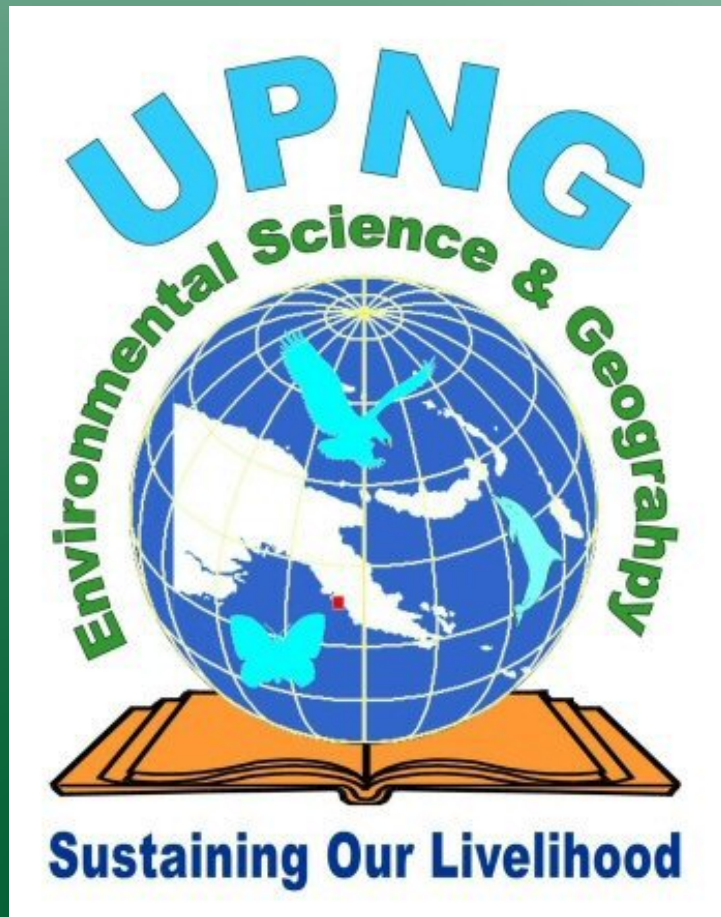
# *Bachelor of Sustainable Development*



- Accompanying document
- Includes:
  - Teaching Sustainable Development at UPNG
  - BSD program 2015 (table)
  - Course outlines
    - for 1.20401 ISD
    - and 1.20402 PSD

E-copy available from me at  
[davidlindsay.mowbray@gmail.com](mailto:davidlindsay.mowbray@gmail.com)

*Bachelor of Sustainable Development  
The New Paradigm: From brown growth to green growth and  
sustainability*



- THANKING YOU
- COME JOIN THE "DEVELOPMENT REVOLUTION"
- Dr David Mowbray retired,
- Formerly Associate Prof ESG UPNG – now pro bono Visiting Staff ESG
- contacts
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  - [davidmowbray@upng.ac.pg](mailto:davidmowbray@upng.ac.pg)
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  - Australia 61450326701