

PERUBAHAN IKLIM, PASAR CARBON, PARIS AGREEMENT,

Oleh: DR. Yetti Rusli, MSc.

Paparan dlm Seminar Perdagangan Karbon sbg
Salah Satu Upaya Mitigasi Perubahan Iklim, Kantor
Kementerian Koordinator Perekonomian RI
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Sea level

Five Pacific islands lost to rising seas as climate change hits

Six more islands have large swaths of land, and villages, washed into sea as coastline of Solomon Islands eroded and overwhelmed

● Headlines 'exaggerated' climate link to sinking of Pacific islands

Reuters

Tuesday 10 May 2016 14.02 BST



Shares 6,016 Comments 1,689

Save for later



Ⓜ The remains of one of six partially eroded islands in the Solomons. Photograph: HANDOUT/Reuters

Most popular



West Ham v Manchester United: last game at Upton Park - live!



Go ahead, touch yourself: eight things to know for masturbation month



Afghanistan and Nigeria 'possibly most corrupt countries', Cameron lets slip



Police hand Cliff Richard sexual abuse claims to prosecutors, sources say

com/international

islands have disappeared due to rising seas and erosion, a

Paris Agreement..insight

Paris Agreement acknowledges that **markets are needed** to get countries on a low emissions development pathway and enhance ambition to keep warming to well below 2 degrees.

Lanjutan Paris Agreement

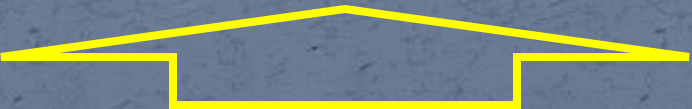
Decision include:

- 1) Recognition of **voluntary cooperation** to implement NDCs and achieve lower emissions using 'internationally transferred mitigation outcomes' or ITMOs – **a new class of carbon assets**;
- 2) Support for **results-based payments** to implement policy approaches; and
- 3) A UNFCCC-governed mechanism that will support mitigation and sustainable development post-2020, which enables **international transfers of emission reductions**

Perubahan iklim dan Kesepakatan global

Pasar karbon, Upaya mitigasi & Adaptasi

Kesepakatan global vektor dari al. science,
economy, political economy ... pasar utk teknologi baru



Pasar karbon.. Rantai usaha..optimalisasi value
product (komoditi; jasa; shadow price;
bankable; ..)



Upaya Mitigasi & Adaptasi ... Best Practices;
scale up, speed up .. Rantai usaha

Contoh Jak Pemerintah Dorong Value Carbon, National Scale (mampu di scale up)

BUMN Bahas Strategi Kurangi Emisi Gas Rumah Kaca utk Pengendalian Perubahan Iklim (SIARAN PERS NO. 25/PIH/KOMINFO/3/2016)

- Prof Rachmat Witoelar: “Setelah COP21, perusahaan2 di dunia berlomba-lomba untuk menunjukkan komitmennya melakukan bisnis yang rendah emisi dan berkelanjutan.. hasil terukur dan menginspirasi perusahaan Indonesia yang lain
- PT Telkom, PT Semen Indonesia, PT Krakatau Steel, PT Pertamina, PT PLN, PT Pupuk Indonesia, PT Garuda Indonesia, PT Bank Negara Indonesia Tbk., Beberapa BUMN tersebut memaparkan kontribusi yang telah dilakukan oleh perusahaan masing-masing untuk mengurangi emisi GRK beserta tantangannya.

Lanjutan..

- PT Telkom, PT Semen Indonesia, PT Krakatau Steel, PT Pertamina, PT PLN, PT Pupuk Indonesia, PT Garuda Indonesia, PT BNI Tbk.,.... memaparkan kontribusi yang telah dilakukan.
- program konservasi energi; pengelolaan sampah/limbah; pengembangan energi baru dan terbarukan; upaya restorasi lahan dan ekosistem seperti program penanaman pohon, mangrove dan konservasi terumbu karang; efisiensi proses produksi; sistem pemberian kredit usaha yang memenuhi standar lingkungan, dll
- dikoordinasikan secara komprehensif oleh Kementerian BUMN

Contoh bilateral join policy explanation: UNFCCC 3th forum of the Standing Committee on Finance at the 14th World Forestry Congress, 8 Sept 2015

- Facilitating Private Sector Involvement for REDD+ Japan Public-Private Platform for REDD+ and Indonesia Expectation on Japan's Public-Private Partnership to Facilitate REDD+..
- [http://unfccc.int/files/cooperation_and_support/financial_mechanism/standing_committee/application/pdf/unfccc-scf_forum_session4_yetti_and_goseki_jp3+indonesia\(rev\).pdf](http://unfccc.int/files/cooperation_and_support/financial_mechanism/standing_committee/application/pdf/unfccc-scf_forum_session4_yetti_and_goseki_jp3+indonesia(rev).pdf)

.....Public Private Partnership on REDD+....

Join Presentation...Conclusion

Guiding Question 22:

- How can **opportunities be harnessed** and **barriers overcome**, in terms of access to private finance for forests (from the perspectives of both providers and recipients)?
- Information gap: JP3-REDD+
- Funding gap: CSR, bilateral, multilateral including GCF and others - but not enough, need more various approaches
- Compliance requirement :
 - Bilateral JCM - one of the FVAs (Framework for Various Approaches)
& one of the opportunities to attract more fund from private sectors

SEDERHANAKAN vector link..melalui pemahaman..

- The economic problem with climate change is that the **emitters** of greenhouse gases (GHGs) **do not face the full cost** implications of their actions (IMF, 2008)
- **social costs** requires value judgements about the value of future climate impacts (Smith *et al.*, 2001)
- **prices for "non-market"** goods and **services**

VALUE CHAIN: Kombinasi jurus jadi strategi..
konversi services jadi komoditi..
or Internalized externalities..
or prices for "non-market" goods and services

Conversion vector of Tree's biomass -
CO2eq:

CO₂ SEQUESTRATION

Tree's biomass to carbon ~ 0.5

Carbon to CO₂ ~ 3.7

Biomass to CO₂ ~ 1.83

Green Economy

(UNEP 2011, Towards a Green Economy)

- “Results in improved human well-being and social equity, while significantly reducing environmental risk and ecological scarcities”
- “REDD+ regime may be the best current opportunity to facilitate the transition to a green economy for (from) forestry”
- investing 0.03% of GDP b/w 2011-2050 to conserve forests & private investment for reforestation → >20% increase value added in forest industry compare to BAU

Scale up & Speed up
the choice of proven best practices (field
actions, technology, keterlibatan Gov-
private-community)

INDC:

http://www4.unfccc.int/submissions/INDC/Published%20Documents/Indonesia/1/INDC_REPUBLIC%20OF%20INDONESIA.pdf

- Prioritas untuk ketahanan iklim (kondisi pemungkin, ketahanan ekonomi, ketahanan kehidupan sosial, serta ketahanan ekosistem dan tata ruang)

INDC..lanjutan

- Nawacita (Sembilan Agenda Prioritas), langkah mewujudkan perubahan jangka panjang; konsisten dengan komitmen nasional untuk ketahanan perubahan iklim
- Posisi geografis di *global belt conveyor* laut (sirkulasi thermohaline), hutan hujan tropis yang luas, dan keanekaragaman hayati yang tinggi, nilai stok karbon tinggi serta untuk sumber energi, dan sumber daya mineral, Indonesia memiliki peran penting dalam mengatasi perubahan iklim global
- Mitigasi dan adaptasi

INDC..lanjutan

Adaptasi:

- kepulauan dengan pantai yg panjang & daerah dataran rendah yang luas
- Populasi masyarakat miskin dan terpinggirkan cenderung tinggal di daerah berisiko tinggi
- inisiatif adaptasi yang telah diarusutamakan ke dalam Rencana Pembangunan Nasional (RAN-API)
- mengurangi resiko terhadap pembangunan di berbagai sektor (pertanian, air, ketahanan energi, kehutanan, kelautan dan perikanan, kesehatan, sarana public, infrastruktur, dan sistem perkotaan) pada tahun 2030

INDC..lanjutan

Strategi ketahanan iklim Indonesia:

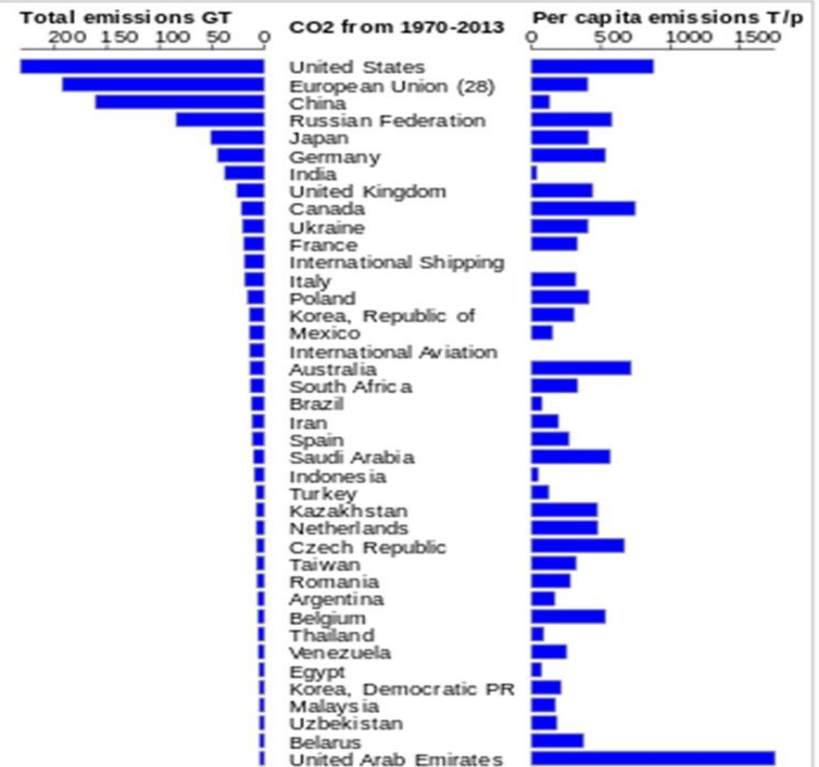
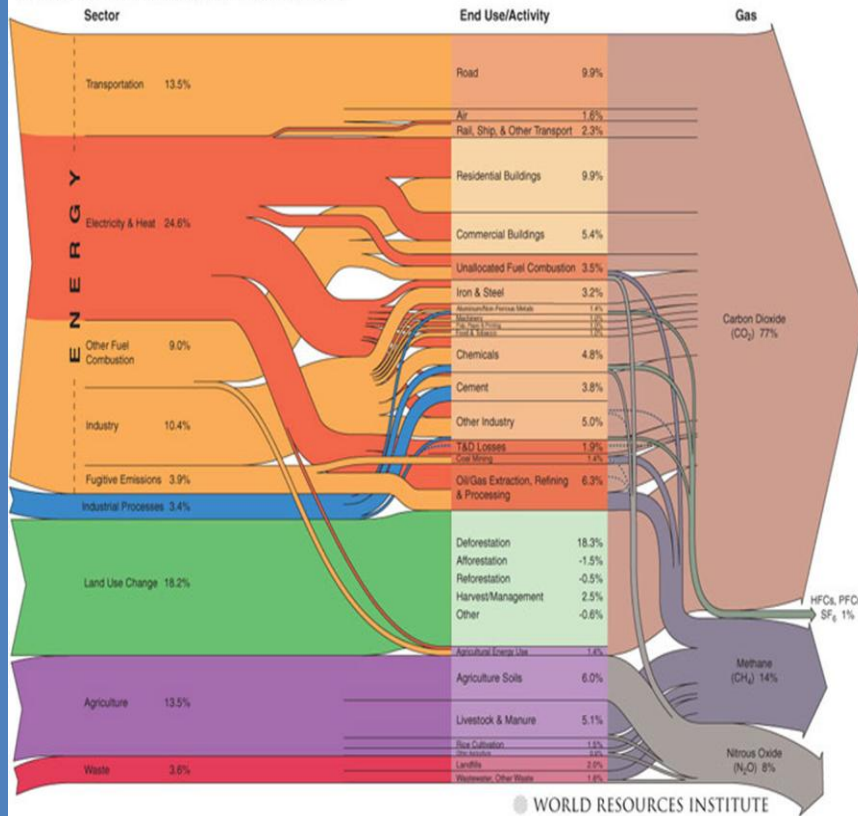
- Integrasi upaya mitigasi & adaptasi utk ketahanan pangan, air dan energi
- Kerentanan iklim
- Langkah prioritas

Dari Konsep menuju actions value carbon upaya mitigasi & adaptasi PI

- Mitigasi untuk capture optimal value (pilihan actions)
- Adaptasi untuk mengurangi resiko PI (ketahanan iklim al. pangan, air, energi)
- Economic Scale: Dalam konteks global, berbasis actions di tapak yg mampu di scale up dan speed up
- Attentions: wilayah tropis, jumlah penduduk, pilihan strategis low carbon (low GHG) ekonomi atau green growth

Hints membaca peluang: PETA DUNIA GHG

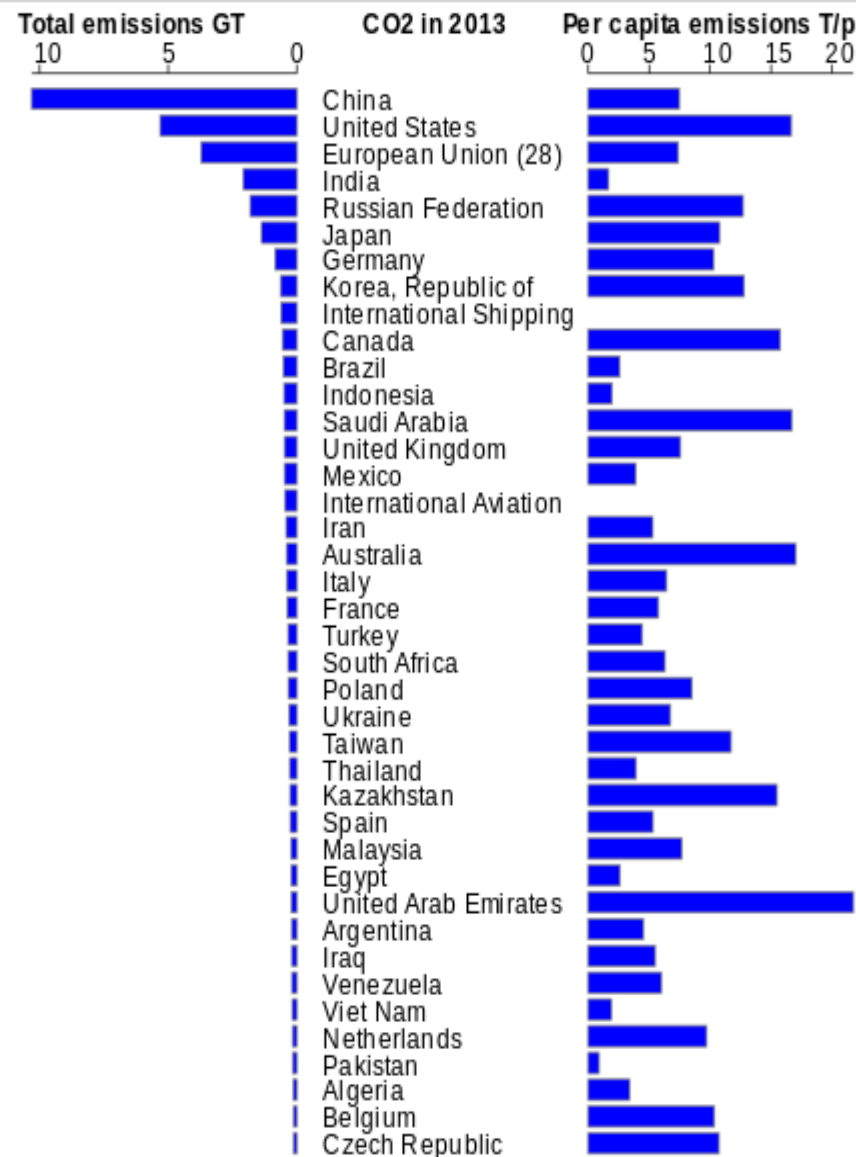
World GHG Emissions Flow Chart



The cumulative CO2 emissions between 1970 and 2013 from the top 40 countries in the world, including some extra-national bodies. The data comes from the [EU EDGAR database](#)



The cumulative CO2 emissions between 1970 and 2013 from the top 40 countries in the world, including some extra-national bodies. The data comes from the [EU EDGAR database](#)



Carbon dioxide emissions for the top 40 countries by total emissions in 2013, given as totals and per capita. Data from [EU Edgar database](#)

Future vision and actions

Padukan analisa peluang, modalities menjadi strategi

Indonesia's commitment and the future potential:
Basic data/idea, Linking the World ...
kebersamaan menghasilkan economic value yg
significant ;
SDGs, Low Carbon & Green Growth

MENYIKAPI KONTROVERSI



Beranda > Berita > Lingkungan

2016 / Februari / 28 03:26

Kontroversi, Studi Baru Mengungkap Adanya Pelambatan Perubahan Iklim

Bagi kalangan ilmuwan, hasil studi ini mengejutkan. Sebelumnya, argumen adanya pelambatan selalu diajukan oleh kalangan yang menyangkal adanya perubahan iklim



Ilustrasi (crooksandliars.com)



Beranda > Berita > Alam

2016 / Februari / 7 19:15

Menumbuhkan Kembali Hutan Hujan Bantu Batasi Perubahan Iklim

Ternyata menumbuhkan kembali hutan adalah sama pentingnya dengan pelestarian hutan hujan sebagai cara untuk mengurangi perubahan iklim



Beranda > Berita > Alam

2016 / Maret / 26 22:30

Perubahan Iklim Meningkat Lebih Cepat dari yang Diperkirakan

Manusia mungkin telah melewati suatu titik yang tidak akan pernah kembali, di mana generasi masa depan yang akan menanggung konsekuensi.



Ilustrasi. (Harvard)

Penemuan terbaru oleh sekelompok ilmuwan terkemuka mengatakan, jika Bumi belum menunjukkan permukaannya yang memanas sepenuhnya, namun dalam waktu singkat, dalam 66 juta tahun terakhir, dampaknya akan datang lebih cepat dengan konsekuensi yang lebih buruk dari yang diperkirakan sebelumnya.

KESIMPULAN

Issue PI, Paris Agreement, Perdagangan Karbon

- Prinsip Ekonomi; Global economy
- prices for "non-market" goods and services; externalities
- Economic scale; best practices & kemampuan utk scale up;
- Public policy yang mampu mengikat keterlibatan private & membagi value lebih luas

TERIMA KASIH

YETTI RUSLI:

yetti.rusli@gmail.com

<http://www.forestforlife.web.id/>



Forest for Life

Cooling down the earth by planting trees.

Planting more, use more means absorbing CO₂ more.

Low Carbon Development Options for Indonesia (Kementerian Keuangan, 2008)

- Climate change is a strategic and development challenge facing Indonesia
- Indonesia emits significant levels of greenhouse gases (GHG) and is highly vulnerable to climate change.
- Political commitment for successful climate change actions is high; global visibility is also high.
- Emerging from the successes of COP 13 in Bali, the UNFCCC Parties are negotiating

..lanjutan..

- Indonesia understands the strong economic rationale to address climate change issues.
- The government significantly reduced subsidies in 2008 and 2005 to better target assistance to the poor.
- The Indonesian government also acknowledges the pressing need to ensure efforts to address climate change are not at the expense of the poor.
- At the same time, Indonesia has significant alternative and renewable energy resources,
- Carbon markets can provide a financial incentive for addressing some mitigation needs, off-setting the potential cost of some actions.

...lanjutan..

- Carbon markets recognize that the most cost effective sources of emissions reductions can often be found in developing countries,
- The current global climate context is creating an historic opportunity for an integrated approach
- Indonesia understands that accessing this kind of innovative financing presents a strategic opportunity.
- Indonesia also has significant potential to control carbon intensity while continuing to develop and grow

..lanjutan..

- Indonesia's development planning cycle is ready for integration of climate change actions and policy reforms.
- The GOI is developing a strategic, multi-year policy reform program,
- The GOI also acknowledge that addressing climate change and energy issues will also generate secondary development benefits and improve quality of life,
- A low carbon options study is an opportunity to evaluate and develop strategic options