

國立臺北大學自然資源與環境管理研究所
112 學年度第二學期 『清潔生產與工業生態』

課程進度(15)：企業永續、氣候韌性發展與淨零轉型
Corporate Sustainability, Climate Resilient Development, Net Zero Transition

● CORPORATE SOCIAL RESPONSIBILITY AND CORPORATE CITIZENSHIP

- Corporate Social Responsibility (CSR) https://sites.hks.harvard.edu/m-rcbg/CSRI/init_define.html
 - ⇒ We define corporate social responsibility strategically. Corporate social responsibility encompasses not only what companies do with their profits, but also how they make them. It goes beyond philanthropy and compliance and addresses how companies manage their economic, social, and environmental impacts, as well as their relationships in all key spheres of influence: the workplace, the marketplace, the supply chain, the community, and the public policy realm.
 - ⇒ The term "corporate social responsibility" is often used interchangeably with corporate responsibility, corporate citizenship, social enterprise, sustainability, sustainable development, triple-bottom line, corporate ethics, and in some cases corporate governance.
- Aspects of Corporate Social Responsibility (CSR): Carroll's CSR Pyramid https://www.business.uzh.ch/dam/jcr:fffff8e67-00b1-0000-00003638158e/Corporate_Citizenship.pdf
 - ⇒ Economic Responsibility => To be profitable
 - ⇒ Legal Responsibility => Respect laws
 - ⇒ Ethical Responsibility => Do what is right
 - ⇒ Philanthropic Responsibility => Contribute to various kinds of social, cultural purposes etc.

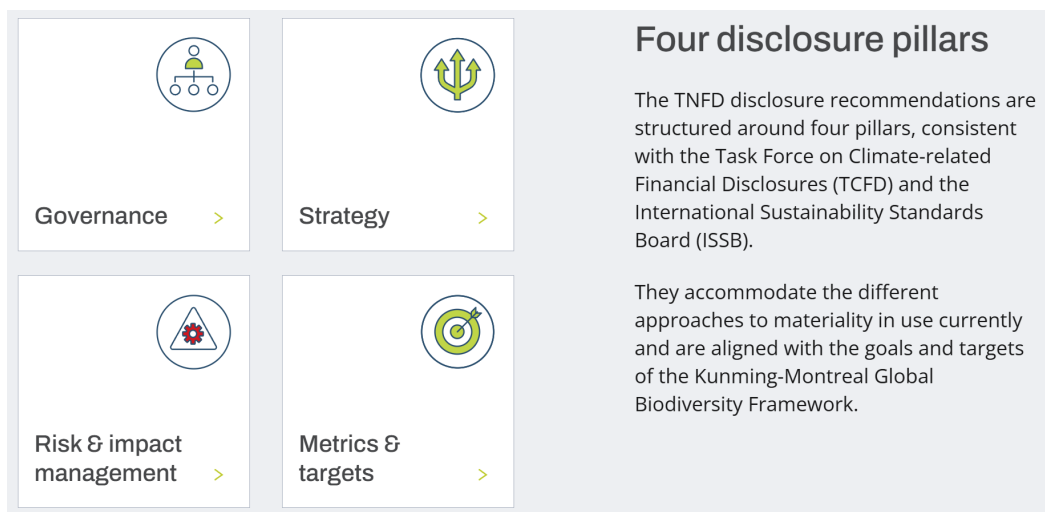


The CSR Pyramid (Source: own work based on Carroll, 1979, 1991, 2004)
(Raczkowski et al., 2016)

- Differences between CSR and Corporate Citizenship (CC)
 - ⇒ CC as the philanthropic part of CSR, especially in terms of a positive influence on society. (Corporate Giving, Corporate Volunteering, Corporate Community Investment)
 - ⇒ CC: "A company's responsibilities toward society" "The social role of business"
 - ⇒ "Corporate citizenship involves the social responsibility of businesses and the extent to which they meet legal, ethical, and economic responsibilities, as established by shareholders. Corporate citizenship is growing increasingly important as both individual and institutional investors begin to seek out companies that have socially responsible orientations such as their environmental, social, and governance (ESG) practices." <https://www.investopedia.com/terms/c/corporatecitizenship.asp>
- Corporate Citizenship => Citizen Engineer

● REPORTING CORPORATE SUSTAINABILITY AND CLIMATE CHANGE

- Disclosure of Non-Financial Information
 - ⇒ Corporate Social Responsibility Report
 - ⇒ Corporate Sustainability Report/Reporting
 - ⇒ Environmental, Social and Governance Report/Reporting
 - ⇒ Climate related Information Disclosure
 - ⇒ Nature related Information Disclosure
- Global Initiatives on Disclosure of Non-Financial Information
 - ⇒ Integrated Reporting <IR> Framework => “Transition to” or “Transition of” <IR>
 - ⇒ Sustainability Accounting Standards Board (SASB) Standards => “Pathway to ISSB”
 - ⇒ Task Force on Climate-Related Financial Disclosures (TCFD)
 - ⇒ TCFD has fulfilled its remit and disbanded in October 2023
 - ⇒ Global Reporting Initiative (GRI)
 - ⇒ IFRS - International Sustainability Standards Board (ISSB)
 - ◆ IFRS S1: General Requirements for Disclosure of Sustainability-related Financial Information
 - ◆ IFRS S2: Climate-related Disclosures
 - ◆ 112 年 IFRS 宣導會講義(新竹場) 2 永續揭露準則 S1 及 S2 介紹.pdf (tpex.org.tw)
 - ⇒ Taskforce on Nature-related Financial Disclosures (TNFD)
 - ⇒ TNFD? Assurance (保證/確信)?
 - ⇒ 台灣證券交易所公司治理中心—企業永續發展 —企業 ESG 資訊揭露

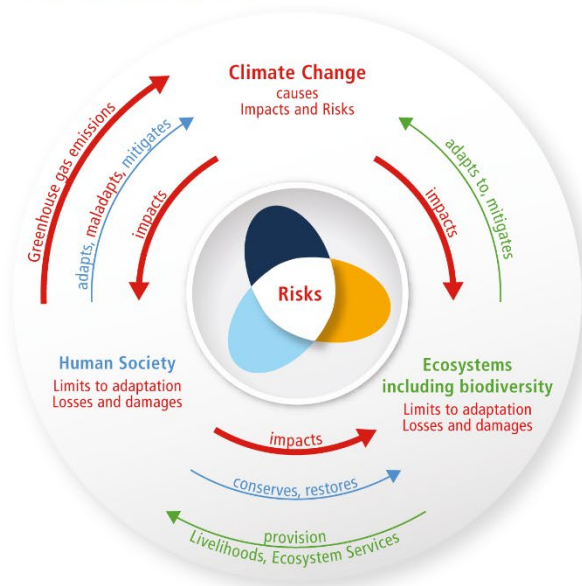


● CLIMATE RESILIENT DEVELOPMENT AND NET ZERO TRANSITION

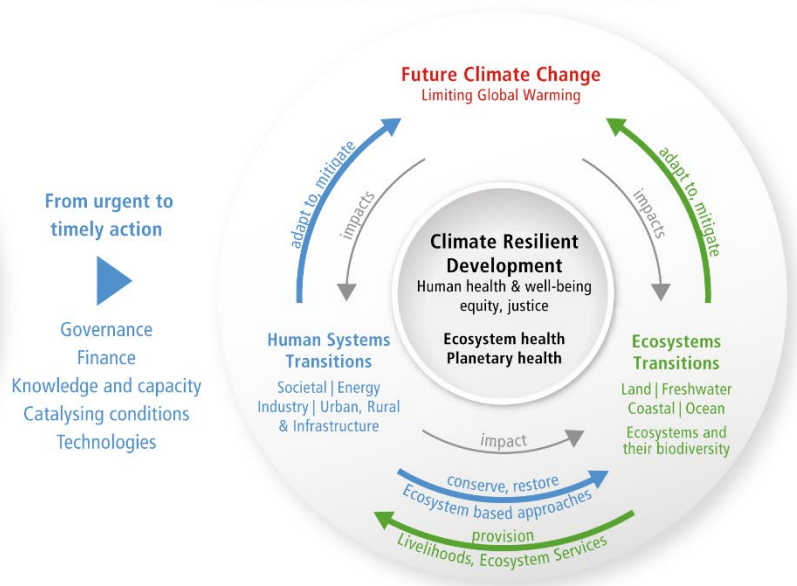
- Climate Resilient Development
 - ⇒ IPCC AR6 WG2 Climate Change 2022: Impacts, Adaptation and Vulnerability (Chp.18)
 - ⇒ Climate resilient development (CRD) is a process of implementing greenhouse gas mitigation and adaptation options to support sustainable development for all.
 - ⇒ Climate change causes impacts and risks => Future climate change: limiting global warming
 - ⇒ Transformation vs. Transition
 - ◆ Transformation: A change in the fundamental attributes of natural and human systems.
 - ◆ Transformative change: A system-wide change that requires more than technological change through consideration of social and economic factors that, with technology, can bring about rapid change at scale.
 - ◆ Transition: The process of changing from one state or condition to another in a given period of time. Transition can occur in individuals, firms, cities, regions and nations, and can be based on incremental or transformative change.
- Net Zero Transition
 - ⇒ Net Zero by 2050 – A Roadmap for the Global Energy Sector - IEA
 - ⇒ 國家發展委員會--臺灣 2050 淨零排放路徑及策略總說明

From climate risk to climate resilient development: climate, ecosystems (including biodiversity) and human society as coupled systems

(a) Main interactions and trends



(b) Options to reduce climate risks and establish resilience



The risk propeller shows that risk emerges from the overlap of:



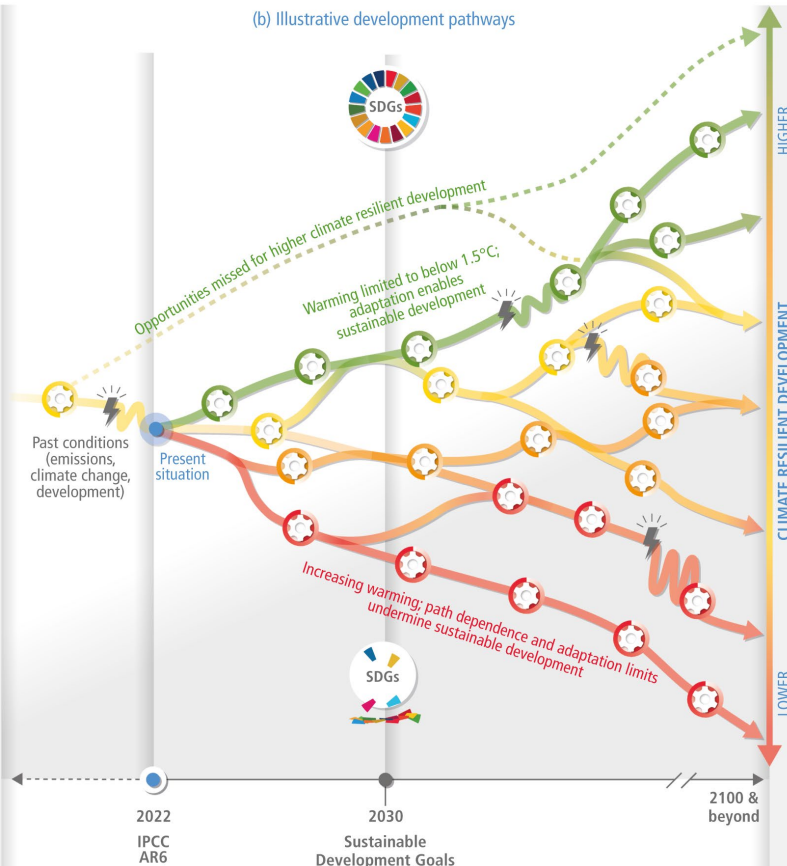
https://www.ipcc.ch/report/ar6/wg2/downloads/figures/IPCC_AR6_WGII_Figure_SPM_001.png

There is a rapidly narrowing window of opportunity to enable climate resilient development

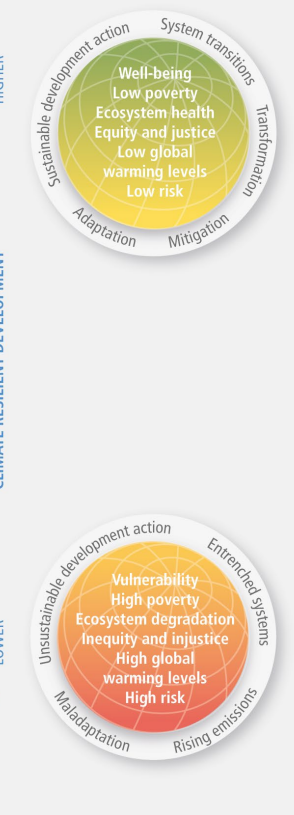
(a) Societal choices about adaptation, mitigation and sustainable development made in arenas of engagement



(b) Illustrative development pathways



(c) Actions and outcomes characterizing development pathways



⚡ Illustrative climatic or non-climatic shock, e.g. COVID-19, drought or floods, that disrupts the development pathway

▭ Narrowing window of opportunity for higher CRD

https://www.ipcc.ch/report/ar6/wg2/downloads/figures/IPCC_AR6_WGII_Figure_18_001.png