



北航环境法国际引智系列讲座



绿园论坛 Green Earth Forum

第3期：欧盟及其主要成员国的气候变化法

CLIMATE CHANGE LAW IN THE EU AND ITS (EX-) MEMBER STATES

主讲人：Luc Lavrysen (比利时宪法法院主席、根特大学教授)

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讲座时间：北京时间2021年12月17日 (周五) 下午16:00-18:30

线下场地：北京航空航天大学海淀校区，新主楼 F207

线上会议：ZOOM (会议号：831 7766 7117)



主讲嘉宾：Luc Lavrysen，比利时根特大学法律与犯罪学院环境法教授，比利时宪法法院主席、根特大学环境法与能源法研究中心原主任、欧盟环境法官论坛主席。主要著作：《气候变化与裁决：比利时报告》《欧盟的水资源综合管理是否已步入正轨？》《欧洲环境法的宪法审查》《比利时宪法法院：欧洲人权法院的卫星？》等。

Professor Luc Lavrysen, an emeritus professor since October 2021, was the director of the Centre for Environmental and Energy Research (CEER) at Ghent University. Since 2020, he has been the president of the Constitutional Court of Belgium. He is also the president of the European forum of Judges for the Environment.



与谈嘉宾：曹明德，中国政法大学钱端升讲座教授，《中国政法大学学报》主编，中国法学会环境资源法学研究会副会长，中国政法大学气候变化和自然资源法研究中心主任。新世纪优秀人才支持计划入选者，第五届全国十大杰出青年法学家。世界自然保护联盟 (IUCN) 环境法学院理事 (执委)。

Dr. Cao Mingde is the Qian Duansheng Chair Professor in Environmental law and served as the director of the Research Center of Climate Change and Natural Resources Law at China University of Political Science and Law (CUPL). Professor Cao is a Ph.D. advisor and is the Editor-in-Chief of the Journal of CUPL. He is also the Vice Chairman of Environmental and Resources Law Society of China Law Society Council, China Law Society. He was the National Ten Outstanding Young Jurists in 2006 awarded by the China Law Society. In May 2017, Professor Cao Mingde obtained the degree of SJD from Elisabeth Haub School of Law at Pace University.



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主办单位：北航法学院环境法经济法中心

Host: Centre for Laws on the Environment, Natural Resources and Economics at Law School Beihang University (BUAA)

特别致谢：

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CLIMATE CHANGE LAW IN THE EU AND ITS (EX-) MEMBER STATES

欧盟及其主要成员国的气候变化法

Emeritus Professor Luc LAVRYSEN – 17 December 2021

- **Paris Agreement** - December 2015 – In force: 4 November 2016

《巴黎协定》于2015年12月12日在第21届联合国气候变化大会（巴黎气候大会）上通过，于2016年4月22日在美国纽约联合国大厦签署，于2016年11月4日起正式实施。

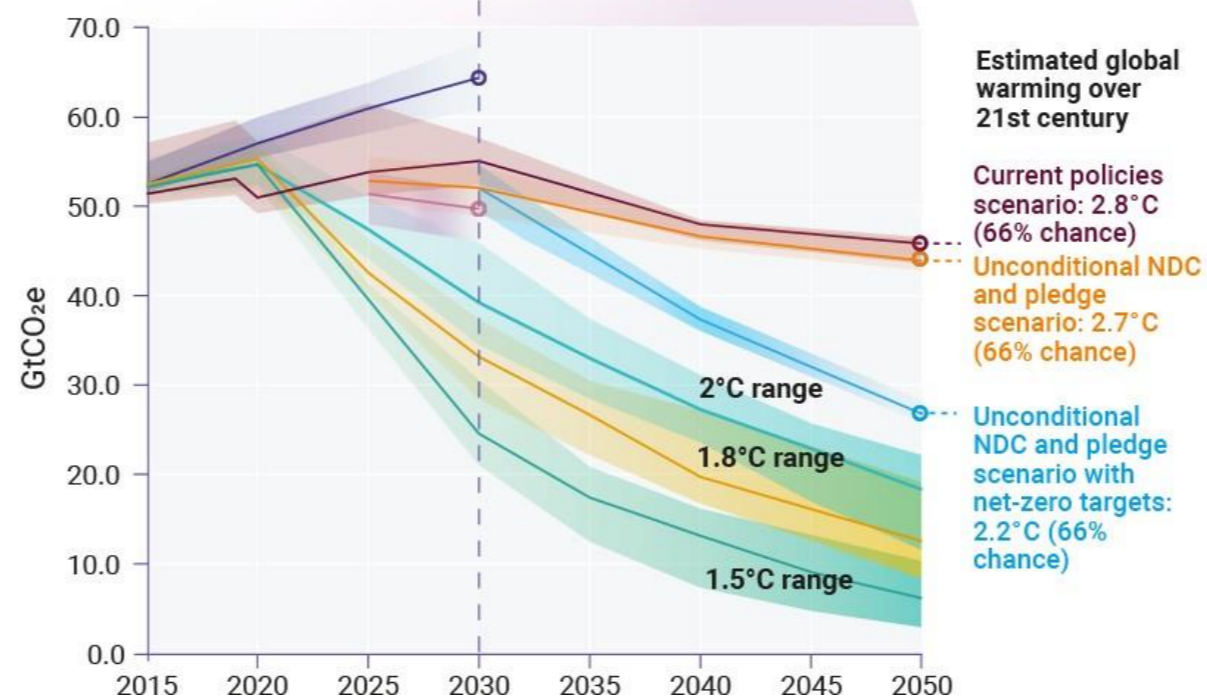
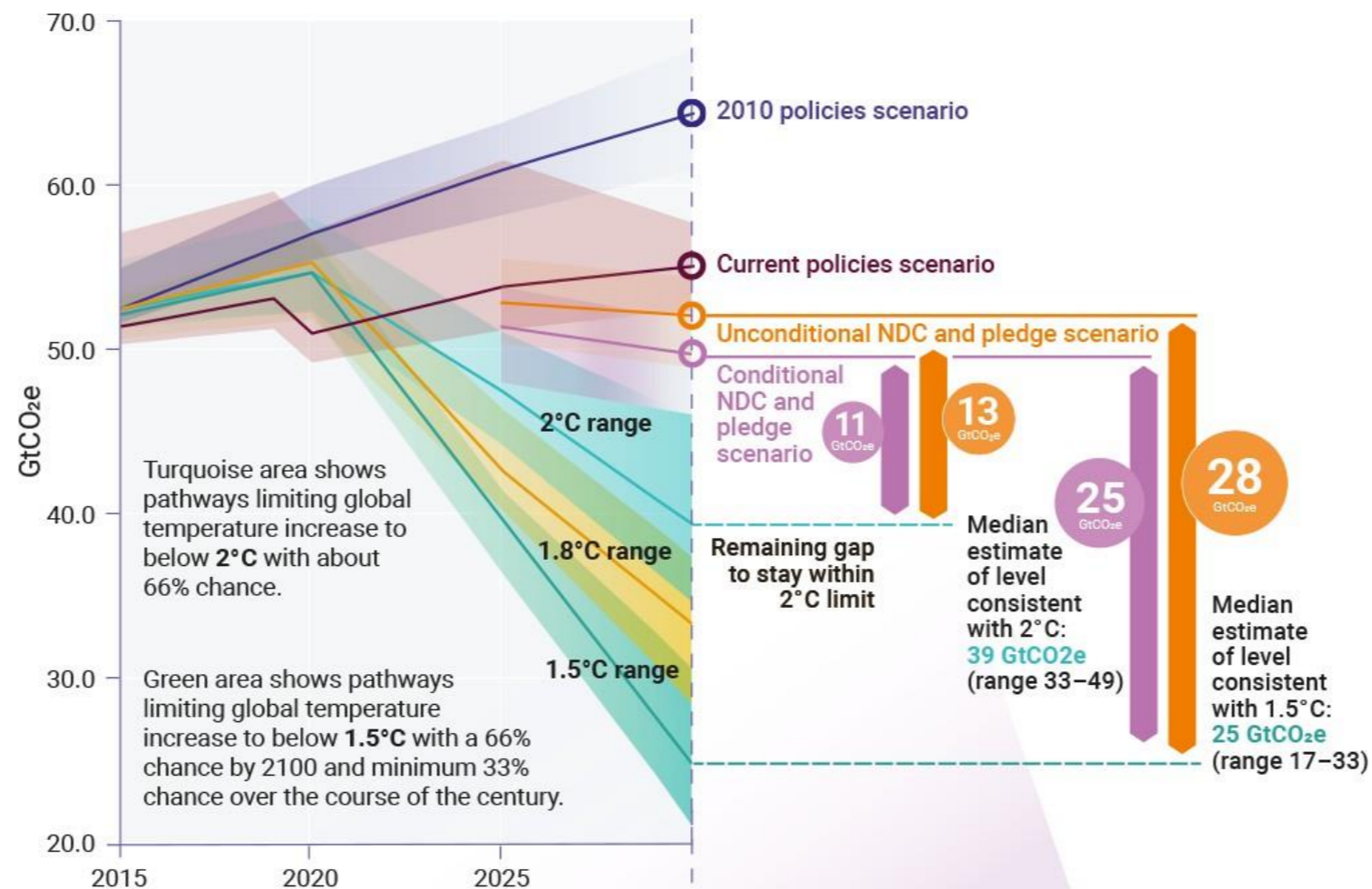
- **Reducing emissions commitments** 减少碳排放的承诺

- a long-term goal of keeping the increase in global average temperature to **well below 2°C above pre-industrial levels**; 长期目标是把全球平均气温升幅控制在工业化前水平以上低于2°C 之内;
- to **aim to limit the increase to 1.5°C**, since this would significantly reduce risks and the impacts of climate change; 并努力将气温升幅限制在工业化前水平以上1.5°C之内，同时认识到这将大大减少气候变化的风险和影响;
- global emissions **should peak as soon as possible** and its recognized that this will take longer for developing countries; 为了实现第二条规定的长期气温目标，缔约方旨在尽快达到温室气体排放的全球峰值，同时认识到达峰对发展中国家缔约方来说需要更长的时间;

INTERNATIONAL COMMITMENTS 国际承诺

- rapid reductions in accordance with the best available science should be taken thereafter, so ***as to achieve a balance between emissions and removals in the second half of the century***此后利用现有的最佳科学迅速减排，以联系可持续发展和消除贫困，在平等的基础上，在本世纪下半叶实现温室气体源的人为排放与汇的清除之间的平衡。
- Countries have to submit comprehensive national climate action plans (nationally determined contributions, NDCs or pledges)各缔约方需要提交全面的国家气候行动计划（国家自主贡献或承诺）
- ***Transparency and global stocktaking*** 透明度和全球盘点
- ***Adaptation*** 适应性
- ***Support climate action of developing countries*** 支持发展中国家的气候行动

UNEP'S EMISSIONS GAP REPORT 2021 联合国环境规划署《2021年排放差距报告》



UNEP'S EMISSIONS GAP REPORT 2021 联合国环境规划署《2021年排放差距报告》

- as a group, G20 members are not on track to achieve either their original or new 2030 pledges. 作为一个集团，G20成员国并没有真正实现其最初或新的2030年承诺目标。
- 10 G20 members are on track to achieve their previous NDCs, while seven are off track 10个G20成员国正在实现其先前的国家发展目标，而7个成员国却偏离了轨道
- few G20 members' NDC targets put emissions on a clear path towards net-zero pledges 少部分G20成员国的国家自主贡献目标放在实现净零排放承诺的明确道路上
- an urgent need to back these pledges up with near-term targets and actions that give confidence that net-zero emissions can ultimately be achieved and the remaining carbon budget kept 迫切需要用短期目标和行动来支持这些承诺，让人们相信最终可以实现净零排放，并保持剩余的碳预算。

UNEP's EMISSIONS GAP REPORT 2021 联合国环境规划署《2021年排放差距报告》

- emissions gap remains large: compared to previous unconditional NDCs, the new pledges for 2030 reduce projected 2030 emissions by only 7.5 %, whereas 30 % is needed for 2°C and 55 % is needed for 1.5°C. 排放差距仍然很大：相较上一轮承诺，各国上报的更新版国家自主贡献目标以及已宣布的其他一些气候变化减缓承诺，仅在原先预测的2030年温室气体年排放量基础上减少了7.5%，然而，要想维持《巴黎协定》2°C温控目标的最低成本路径，则要求实现30%的减排，要想实现1.5°C目标，需要减排55%。
- global warming at the end of the century is estimated at 2.7°C if all unconditional 2030 pledges are fully implemented and 2.6°C if all conditional pledges are also implemented. 如果无条件的2030年承诺被充分执行，则本世纪末的全球变暖估计为2.7°C，如果有条件的2030年承诺也被执行，则为2.6°C。
- if the net-zero emissions pledges are additionally fully implemented, this estimate is lowered to around 2.2°C. 如果净零排放承诺得到进一步全面落实，该估计值将降至2.2°C左右。

UNEP's EMISSIONS GAP REPORT 2021 联合国环境规划署《2021年排放差距报告》

- The global mean temperature in 2020 was estimated to be 1.20 °C above the average temperature of the late 19th century **据统计，2020年的全球平均气温比19世纪末的平均气温高1.20°C**
- Observed effects **监测效果**
 - Droughts and Heat Waves **干旱和热浪**
 - Sea level rise **海平面上升**
 - Hurricanes **飓风**
 - Flooding's **洪水**
 - Fires **火灾**



Glasgow Climate Pact 格拉斯哥气候公约

IV. Mitigation 缓解气候变化

15. reaffirms the long-term global goal to hold the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;重申《巴黎协定》的温度目标，即将全球平均气温增幅控制在比工业化前水平高2°C以内，并努力将气温增幅限制在比工业化前水平高1.5°C；

16. Recognizes that the impacts of climate change will be much lower at the temperature increase of 1.5 °C compared with 2 °C, and resolves to pursue efforts to limit the temperature increase to 1.5 °C;认识到与温度上升2°C相比，升温1.5°C时气候变化的影响将大大降低，并决心继续努力将温度上升限制在1.5°C以内；

17. Also recognizes that limiting global warming to 1.5 °C requires rapid, deep and sustained reductions in global greenhouse gas emissions, including reducing global carbon dioxide emissions by 45 per cent by 2030 relative to the 2010 level and to net zero around mid-century, as well as deep reductions in other greenhouse gases;认识到要将全球变暖幅度限制在1.5°C以内，就需要迅速、大幅度和持续地减少全球温室气体排放，包括到2030年使全球二氧化碳排放量相对于2010年减少45%，并在本世纪中叶左右达到净零排放，并大幅度减少其他温室气体；

18. Further recognizes that this requires accelerated action in this critical decade, on the basis of the best available scientific knowledge and equity, reflecting common but differentiated responsibilities and respective capabilities and in the context of sustainable development and efforts to eradicate poverty;又认识到为此需要在这关键十年中加快行动，以现有最佳科学知识和公平为基础，反映共同但有区别的责任和不同国情并在可持续发展和消除贫困努力的背景下，确定各自的责任和能力；

GHENT UNIVERSITY 19. Invites Parties to consider further actions to reduce by 2030 non-carbon dioxide greenhouse gas emissions, including methane; 欢迎缔约方考虑采取进一步行动，到2030年减少包括甲烷在内的非二氧化碳温室气体排放；

— 2020:

- Reduce emissions with 20 % (compared with 1990) – on track : - 24 % (-31 %) 减少20%的排放量 (与1990年相比) -按计划: -24% (-31%)
- Increase energy efficiency with 20 % (compared with BAU) – on track in 2020 源效率提高20% (与一切如常情景相比, BAU即Business-as-usual, 假设政府政策、技术以及社会偏好以最近数年来的方式和速度持续发展下去。)
- Increase share of renewable energy till 20 % - on track : - 20 % (-21.6%) 将可再生能源的份额提高到20% -按计划:- 20% (- 21.6%)

Impact Pandemic 影响大规模流行疾病

– 2030 – initial 初始

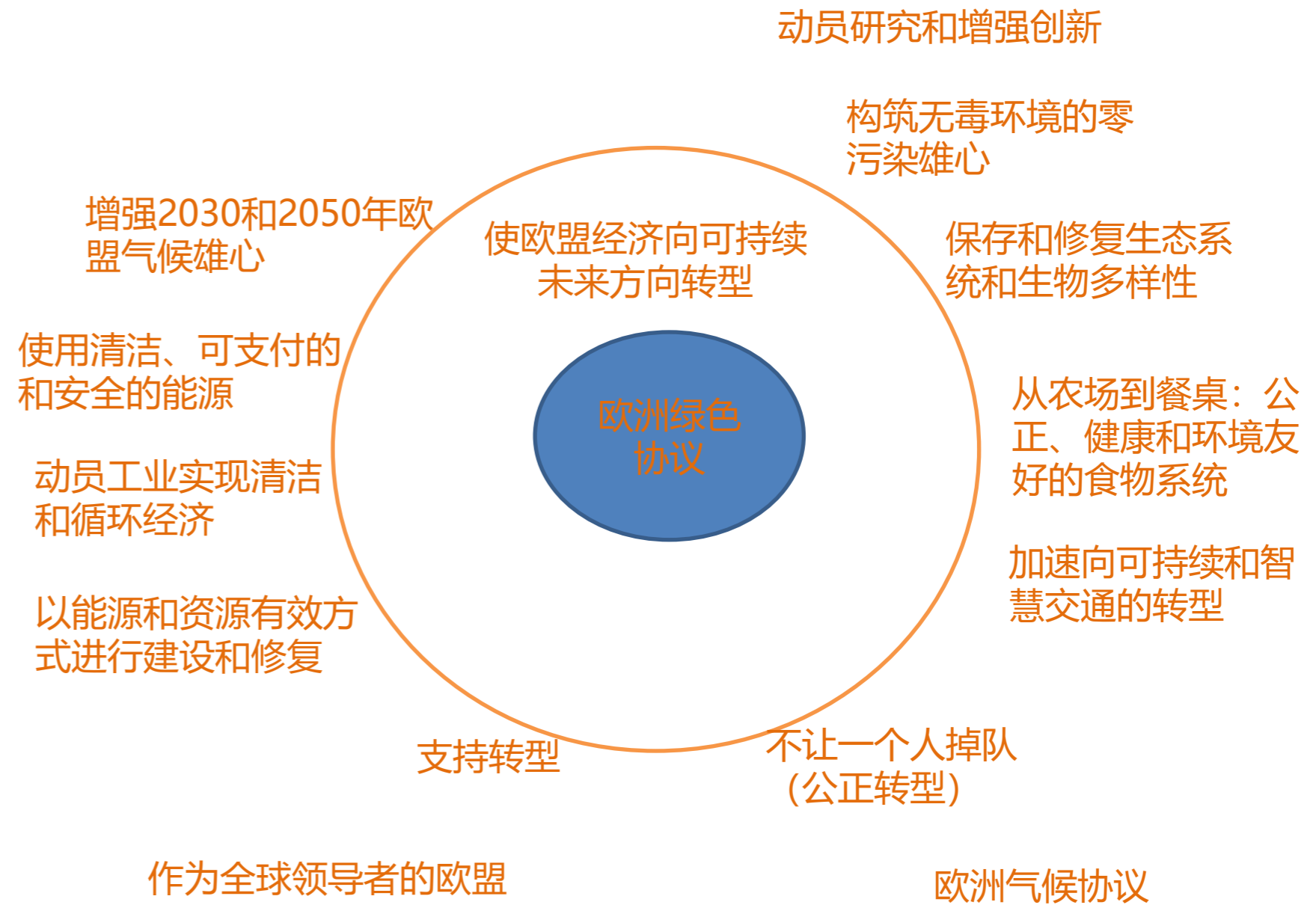
- Reduce emissions with at least 40 % (compared with 1990) 减少至少40%的排放量 (与1990年相比)
 - ETS -43 % (compared with 2005) 欧盟排放交易体系-43% (与2005年相比)
 - Effort Sharing -30 % (2005) - specific objectives for each MS – NECP’s – Periodic – Review 减排责任分担- 30%(2005)-每个欧盟成员国 (MS) 的具体目标- NECP (国家能源和气候计划) 的-定期-审查
 - Land Use and Forestry Regulation 2021-2030 (LULUCF): accounted emissions from land use are entirely compensated by an equivalent removal of CO₂ from the atmosphere through action in that sector (“no debit” rule) 《2021-2030年土地使用和林业条例》(LULUCF): 土地使用产生的已核算排放, 通过该部门的行动从大气中消除等量的CO₂, 完全得到补偿(“无借记”规则)。
- Share of renewable energy: at least 32 % 可再生能源份额: 至少32%
- Energy efficiency: increase of 32.5 % (compared with BAU) 能源效率: 提高32.5% (与一切如常情景相比)

INCREASED AMBITIONS OF VON DER LEYEN COMMISSION (1.12.2019)

欧盟委员会主席冯德莱恩雄心勃勃 (2019年12月1日)

- European Green Deal: increasing the ambition 欧洲绿色协议:提高了雄心壮志
 - 2030: - 50 à 55 % emission reduction 2030年: 减排50%至55%
 - 2050: net-zero greenhouse gas emissions objective 2050年: 达到温室气体净零排放目标
- Draft EU Climate Law 欧洲气候法草案
 - Set the long-term direction for meeting the 2050 climate-neutrality objective through all policies, in a socially-fair and cost-efficient manner 以维护社会公平和节约成本效益为基本方式, 通过所有政策为实现2050年气候中性目标设定长期方向
 - Create a system for monitoring progress and take further action if needed 创建一个监控进度的系统, 并在需要时采取进一步措施
 - Provide predictability for investors and other economic actors 为投资者和其他经济参与者提供可预测性
 - Ensure that the transition to climate neutrality is irreversible 确保向气候中性过渡不可逆转

EU GREEN DEAL 欧盟绿色协议



- **Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality: 2021年6月30日, 欧洲议会和理事会建立实现气候中性框架条例 (2021/1119):**

(Official Journal 9 July 2021 - entered into force on 29 July 2021)

(官方刊物2021年7月9日- 2021年7月29日生效)

- a legal objective for the Union to reach **climate neutrality** by 2050 欧盟到2050年实现气候中性的法律目标
- an ambitious 2030 **climate target of at least 55% reduction of net emissions** of greenhouse gases as compared to 1990, with clarity on the contribution of emission reductions and removals 2030年的重大气候目标是, 与1990年相比, 温室气体净排放量至少减少55%, 并明确减排和清除的贡献
- recognition of the need to enhance the EU's carbon sink through a more ambitious LULUCF **regulation** 认识到有必要通过更雄心勃勃的LULUCF条例来提高欧盟的碳汇

- a process for **setting a 2040 climate target**, taking into account an indicative greenhouse gas budget for 2030-2050 to be published by the Commission **制定2040年气候目标的过程，要考虑到欧盟委员会将公布的2030-2050年指示性温室气体预算**
- a commitment to **negative emissions after 2050** **承诺在2050年后实现负排放**
- the establishment of **European Scientific Advisory Board on Climate Change**, that **will provide independent scientific advice** **建立欧洲气候变化科学咨询委员会，该委员会将提供独立的科学建议**
- stronger provisions on **adaptation** to climate change **加强适应气候变化的规定**
- strong **coherence across Union policies** with the climate neutrality objective **欧盟各政策与气候中心目标具有高度一致性**
- a commitment to **engage with sectors to prepare sector-specific roadmaps** charting the path to climate neutrality in different areas of the economy **承诺与各部门合作，制定各部门特有的路线图，绘制不同经济领域气候中性的实现路径**

FIT FOR 55 PACKAGE 能源和气候一揽子计划

Increasing the ambition of EU emissions trading

The EU Emissions Trading System (EU ETS) is a cornerstone of the EU's policy to combat climate change and a key tool in reducing greenhouse gas...

Increasing the ambition of the EU's Effort Sharing Regulation

The EU's current Effort Sharing Regulation (EU) 2018/842 establishes binding annual greenhouse gas emission targets for Member States for the period...

增强欧盟排放交易的雄心

欧盟排放交易系统是欧盟应对气候变化政策的基石，也是减少温室气体排放的重要工具。。。

增加欧盟“减排责任分担规则”的雄心

欧盟当前的减排责任分担规则2018/842为成员国在此期间建立了具有约束力的年度温室气体排放目标...

Aviation and the EU ETS

Aviation is one of the fastest-growing sources of greenhouse gas emissions. The EU is taking action to reduce aviation emissions in Europe and working...

Land Use, Forestry and Agriculture

Under current EU legislation, EU Member States have to ensure that accounted greenhouse gas emissions from land use, land use change or forestry are...

航空与欧盟排放交易体系

航空是温室气体排放增长最快的来源之一。欧盟正在采取行动减少欧洲的航空排放。。。

土地利用、林业和农业

根据目前的欧盟立法，欧盟成员国必须确保土地利用、土地使用变化或森林造成的温室气体排放是...

Social Climate Fund

As part of the revision of the EU emissions trading system (EU ETS) under the Fit for 55 legislative package, the European Commission is proposing to...

CO₂ emission performance standards for cars and vans

Regulation (EU) 2019/631 currently sets EU fleet-wide carbon dioxide (CO₂) emission performance standards for new passenger cars and new light...

社会气候基金

作为欧盟排放交易体系修订的一部分，欧盟委员会建议。。。

汽车和货车二氧化碳排放性能标准法规2019/631目前为新乘用车和新轻型车设定了欧盟车队范围内的二氧化碳（CO₂）排放性能标准。。。

- **EU Emissions Trading System (EU ETS)** 欧盟排放交易体系
 - cornerstone of the EU's policy to combat climate change - a key tool in reducing greenhouse gas emissions cost-effectively: 欧盟碳市场已经成为了欧盟实现其气候政策的基石，其中欧盟排放交易体系一直被视为欧盟控制温室气体排放、实现碳中和最有效的工具。
 - since EU ETS was introduced in 2005, emissions have been cut by around 43% in the sectors covered by emissions trading (power and heat generation, energy-intensive industrial sectors and commercial aviation within Europe) 自2005年引入欧盟排放交易体系以来，排放交易涵盖的行业(欧洲的电力和热力发电、能源密集型工业部门和商业航空)的排放量减少了约43%
 - these sectors account for 41% of the EU's total emissions, so their contribution is crucial to achieving the overall EU emissions reduction targets. 这些行业的排放量占欧盟总排放量的41%，因此它们的贡献对实现欧盟整体减排目标至关重要。

– Commission proposal: 委员会建议:

- a new target to reduce emissions from the ETS sectors by 61% by 2030, compared to 2005 levels 新的目标是到2030年将排放交易部门的排放量比2005年减少61%
- annual emissions reduction of 4.2% (instead of 2.2% per year under the current system) 每年减少4.2%的排放(而不是现行制度每年减少2.2%)
- carbon border adjustment mechanism; put a price on the carbon content of imports of a targeted selection of products; ensure that ambitious climate action in Europe does not lead to ‘carbon leakage’ (碳界调节机制;对特定产品的进口含碳量进行定价;确保欧洲雄心勃勃的气候行动不会导致“碳泄漏”)
- phasing out free allowances – full auctioning (also aviation) 逐步取消免费补贴-全面施行配额拍卖(包括航空业)
- including emissions from maritime activities in the EU ETS 包括欧盟排放交易体系中海事活动的排放
- introducing a new, separate emissions trading system to cover emissions from fuels used in road transport and buildings 引入一个新的、独立的排放交易系统,以涵盖道路运输和建筑中使用的燃料排放

EFFORT SHARING (NON-ETS) 减排责任分担 (非排放交易体系)

- The EU's current Effort Sharing Regulation (EU) 2018/842 establishes binding annual greenhouse gas emission targets for Member States for the period 2021–2030 目前欧盟的《减排责任分担条例》(EU) 2018/842确立了2021-2030年期间各成员国具有约束力的年度温室气体排放目标
- Commission Proposal: 委员会建议:
 - Increase the EU-wide emission reduction target for the Effort Sharing sectors from the current 29% to 40% by 2030, compared to 2005 与2005年相比, 到2030年将欧盟范围内的减排责任分担部门的减排目标从目前的29%提高到40%
 - Set more ambitious national targets for Member States on a fair and cost-efficient basis 在公平和具有成本效益的基础上为成员国制定更雄心勃勃的国家目标
 - Update flexibility mechanisms to allow Member States to attain their Effort Sharing targets in a cost-efficient manner 更新灵活性机制, 使成员国能够以具有成本效益的方式实现其减排责任分担的目标
 - Contribute to the European Green Deal objective of EU-wide climate neutrality by 2050 为到2050年实现欧盟范围内气候中性的欧洲绿色协议目标做出贡献
 - Heavily debated ! 激烈讨论!

JUST TRANSITION FUND 公平过渡基金

- €19.2 billion EU Fund 192亿欧元欧盟基金
- fresh money made available to support EU countries in their green transition; 新
的资金可用来支持欧盟国家的绿色转型;
- €7.5 billion financed under the EU's 2021-2027 budget
欧盟2021-2027年预算资助75亿欧元
- €10 billion external assigned revenue stemming from the European Recovery
Instrument 来自欧洲复苏工具的100亿欧元外部指定收入

OTHER MEASURES 其他措施

- Directive 2009/28/EC – renewable energy - EU wide and national increasing targets
指令2009/28/EC -可再生能源-欧盟范围以及国家增长目标
- Directive 2009/125/EC - CCS 指令2009/125/EC - CCS
- Directive 2010/31/EU – energy efficiency of buildings
指令2010/31/EU -建筑物的能源效率
- Directive 2010/30/EU – energy efficiency of electric equipment
指令2010/30/EU 电力设备的能源效率
- Regulation (EU) 2018/1999 – governance of the energy union and climate action
2018/1999 (欧盟) 条例——能源联盟治理和气候行动

CLIMATE CHANGE LAWS IN (EX-)EU MS 欧盟(前)成员国的气候变化法律

- UK: 2008 英国
- Denmark: 2014 丹麦
- Finland: 2015 芬兰
- France: 2015 法国
- Sweden: 2017 瑞典
- Norway: 2017 挪威
- Netherlands: 2019 荷兰
- Germany: 2019 德国
- Spain: 2020 西班牙
- Ireland: 2020 爱尔兰
- Portugal 2021 葡萄牙

CLIMATE CHANGE LAWS IN (EX-)EU MS 欧盟(前)成员国的气候变化法律

- Can contribute to implementation 有助于执行
 - Independent Committee 独立委员会
 - Parliamentary control 议会控制
 - Access to Justice & Judicial review 实现正义和司法审查

CLIMATE LITIGATION 气候诉讼

— Urgenda (2015, 2018, 2019), Friends of the Irish Environment (2020), Grande-Synthe & Notre Affaire a Tous (2020-2021), Neubauer (2021), Klimaatzaak (2021), Royal Dutch Shell (2021)....

乌尔根达(2015, 2018, 2019), 爱尔兰环境之友(2020), 格兰德尼桑与Notre Affaire a Tous (法国非政府组织) (2020-2021), 纽鲍尔(2021), 克利马扎克(2021), 荷兰皇家壳牌 (2021)....

— ECtHR – DuarteAgostinho ea v. Portugal and 33 Other States; Verrein KlimaSeniorinnen Schweiz ea v. Switzerland

埃切尔·杜阿尔蒂尼奥·阿戈斯蒂尼奥诉葡萄牙和其他33个国家
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