

The Taiwan Law Review

月旦法學

建構現代法學新座標 · 展望廿一世紀法治國

金鼎獎
推薦優良雜誌



本誌獲 EBSCO 資料庫收錄

Oct.
2023

NO. 341

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寰宇法訊 Criminal Law as a Potential and Necessary Means to

Fight the Global Climate Crisis? Helmut Satzger



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Criminal Law as a Potential and Necessary Means to Fight the Global Climate Crisis?



相關文獻

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Abstract

Climate change necessitates urgent legal action at both national and international levels to protect the planet and ensure sustainable global cooperation. The concept of “climate neutrality”, which aims to balance positive and negative emissions to combat climate change effectively, demands the establishment of an effective Climate Criminal Law which should limit climate-damaging behaviours while reconciling individual liberties with climate protection. While dogmatic approaches are essential, they encounter difficulties in defining the object of protection, proving causality and addressing social utility concerns. On an institutional level, the development of climate criminal law must involve the community of states, acknowledging that the atmosphere is a shared resource. Therefore, global jurisdiction and transnational cooperation are essential.

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DOI: 10.53106/1025593134111

Keywords: Climate Criminal Law, Objections against climate criminal law and its justification, Ecocide, Legal justification of climate protests

V. Central justifications of Climate Criminal Law

VI. (Inter)national climate crimes: Global jurisdiction and transnational cooperation

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I. Climate change and climate crisis

Climate change has disastrous impacts on our planet, with numerous dangers and damages becoming more and more evident in all parts of the world. Global warming has led to the melting of ice caps and glaciers across the planet, resulting in rising sea levels that threaten to engulf low-lying areas. As a result, coastal cities and populations especially are at risk of flooding, which could lead to unprecedented damage and loss of human life. Additionally, climate change is causing extreme weather events such as heatwaves, droughts, storms, and hurricanes, among others. These incidents lead to agricultural damage, forest fires, and destruction of infrastructure, causing significant economic loss. Climate change and climate crisis are not a phenomenon of the future, but a real-time threat to the world today.

Anthropogenic climate change is based on the intensification of the natural greenhouse effect by increasing the concentration of greenhouse gases in the atmosphere.¹ Since the beginning of industrialisation², the concentration of greenhouse gases in the atmosphere has increased considerably, which is mainly driven by the sectors of energy, industry, buildings, transport, agriculture, waste management, land use and forestry.³ This increased release of carbon dioxide has disturbed the global carbon cycle, which used to be in balance in pre-industrial times. In addition, there is also an increased emission of other long-living greenhouse gases, such as methane (CH₄), nitrous oxide (N₂O) and artificial fluorinated gases (so called F-gases). Climate science detected a past increase of the average global surface temperature by more than 1.2°C.⁴

¹ *Solomon et al.*, Technical Summary, in: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, 2007, p. 81.

² The beginning of the industrialisation is dated differently depending on the region. However, an increase in greenhouse gas concentrations in the atmosphere can be traced back to the first industrial processes taking place around 1750; see *Solomon et al.*, Summary for Policymakers, in: *Climate Change 2007* (fn. 1), p. 2.

³ See German Federal Climate Protection Act of 12th December 2019 (BGBl. 2019 I, p. 2513), Annex 1 to § 4 and § 5.

⁴ *Allen et al.*, Framing and Context, in: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*, 2018, p. 51.

The dangerous consequences resulting from the rise in global temperature mean that the possibility of emitting greenhouse gases has “normatively” reached its limits. From nature’s perspective, the atmosphere can only be “loaded” with greenhouse gases to a certain extent. It must therefore be classified as a “limited good” the usage of which has flared up a global resource dispute. There is a threat of serious overuse since the atmosphere cannot be concretely assigned to any state authority and certainly not to any company or private individual, with the latter profiting greatly from the increase in the greenhouse gas concentration in the atmosphere.

The only way out of the climate crisis is to limit global warming. Almost all countries in the world have agreed to do so in the Paris Agreement of 2015. In particular the signatory states have committed themselves to limiting global warming to well below 2°C, but if possible to 1.5°C above pre-industrial levels.⁵

II. Is there a role to play for criminal law in the climate crisis?

The current discussions on climate change continue to gain momentum not only in Germany and Europe, but worldwide. In Europe, not a day goes by without public discourse being fed with more and more reports on the causes and consequences of man-made climate change. Climate change is deeply embedded in the consciousness of society and permeates wide areas of science and politics.

The consequences of the climate crisis are so severe and obvious that the law in its various forms naturally has an important role to play in overcoming such challenges. It is strange, however, that – although the violation and endangerment of fundamental interests and legal goods are at issue here – the use of (national) *criminal law* against those (presumably) responsible for the climate crisis has hardly played a role so far.

Things look rather different on the international level. Here, it is at least being discussed whether an international crime (usually referred to as ecocide) should be included in the statute of the International Criminal Court, and similar initiatives are currently being taken at the level of EU law. I would like to start with that aspect of “climate criminal law”, i.e. the level of international criminal law (see III.). This is not because the creation of such a statute is particularly likely at the moment – on the contrary. However, the substantive discussion of the proposals is ongoing, it has attracted wide public attention and, apart from being instructive, this will help to create a general awareness that criminal sanctions may be useful – if not indispensable – in combating climate

⁵ Bodansky, The Legal Character of the Paris Agreement, Review of European, Comparative & International Environmental Law 2016, 146; Rajamani, The 2015 Paris Agreement: Interplay Between Hard, Soft and Non-Obligations, Journal of Environmental Law 2016, 354.

change and its causes.

However, the focus of my observations is on national law, i.e. the question of whether national legislators can, should and – perhaps even – must create climate criminal law in their legislation (V. 2. c.).⁶ In national (especially German) law, dogmatic problems have to be overcome and fundamental obstacles need to be addressed (see IV.).

Considering the emergence of national criminal offences in the field of climate change law, one must also declare early on to which set of facts such a national climate change law would and could be applied. We will see that most complex questions will come up here, the answers to which cannot be addressed soon enough (see V.).

III. Ecocide: A step towards an effective International Climate Criminal Law?

1. Efforts to make climate-damaging behavior a criminal offense

As a matter of fact, there already are efforts to make climate-damaging behaviour an international criminal offence: Since the 1970s, there has been a discussion about the introduction of a so-called ecocide criminal law at the international level, which would probably also cover climate-damaging behaviour.⁷ Roughly speaking, ecocide is intended to protect the global environment from serious damage even in times of peace and to define the environment as such as an object protected by criminal law. At present, there are again discernible efforts in this direction. For example, the non-governmental organisation “Stop Ecocide Foundation” is actively elaborating a definition of the term “ecocide” that could be endorsed by the international community.⁸

2. Challenges and criticisms

A new offence of ecocide, however, is faced with considerable criticism:

First of all, the required implementation at the level of the Rome Statute may be criticised: The inclusion of such a new core crime could overburden the ICC. It is also difficult to imagine a political agreement in this respect. A better solution could be the conclusion of a separate international treaty of a coalition of willing states, including the establishment of a specialised international criminal court.

⁶ It should also be mentioned at this point that the Member States of the EU might in future be obliged to introduce climate offences if the EU-legislator adopts a corresponding directive.

⁷ *Higgins et al.*, *Crime Law and Social Change* 2013, Vol. 59, p. 251 et seq; see also *Dittrich*, *Political Ecology* 2014, Vol. 136, pp. 84 et seq.

⁸ See stopecocide.earth (last accessed 8/23).

Secondly, the current proposals of the crime definition are primarily oriented towards serious environmental damage and therefore cover severe, widespread and/or long-term environmental damage. These thresholds are controversial in and of themselves. In the face of the climate crisis, however, they do not seem capable of capturing climate-damaging behaviour: In addition, the important aspect of compensation (see below V. 2. b.) is not taken into account.

Thirdly, according to the proposal, ecocide is mainly restricted to “unlawful” behaviour. In this respect, the central problem is the relevance of “permissions” under national administrative law. Accepting national legalisations would hinder international standards and would allow every state to create its “own ecocide offence”.

3. Perspectives and significance

However, I do not want to delegitimise the project of an international crime of ecocide as such. It could bring about a global change in consciousness, directing the international focus towards more environmental protection, and it could also be understood as the prelude to an adequate role of criminal law for the purpose of climate protection. In view of the considerable criticism and the already difficult situation of the ICC, the introduction of a crime of ecocide seems to be a long way off anyway.

IV. Key objections to the application of criminal law to the climate issue

The solution may then be to refer to national (or maybe Europe-wide harmonised) criminal law. Even though combating the climate crisis is a high priority in society and politics in Germany, in Europe and even worldwide, the call for a possible inclusion of criminal law at the level of national law has not yet been made. There are two main reasons for this, based on the one hand on the dogmatic difficulties of national criminal law (1.) and on the other hand on the societal benefits and the supposed indispensability of such behaviour (2.).

1. The dogmatic difficulties

At first glance, it seems dogmatically difficult to classify climate-damaging behaviour in the system of criminal law – not only from a German perspective.⁹ Criminal law is considered an *ultima ratio* instrument when important legal interests are violated. Accordingly, it is primarily entrusted

⁹ This lecture is based on a broad conception of criminal law, covering not only those sanctions classically associated with this field of law, but also different sanctions within the conception of the Engel case (ECtHR, *Engel and Others v. the Netherlands*, Judgment of 8 June 1976, no. 5100/71 et al., Nos. 5100/71 et al., Series A, No. 22, para. 82; cf. *Satzger*, *International and European Criminal Law*, 10th ed. 2022, § 11 margin no. 69).

with the protection of elementary individual legal interests (such as life, body, health, property and freedom). Based on the fundamentals of climate change already described, it seems obvious to focus on the violation of individual legal interests. Due to the far-reaching and often dramatic consequential damage of climate change, such elementary legal interests are ultimately impaired or destroyed – for example, when a person dies or is injured due to a heat wave or a flood disaster. Even though there is no doubt that climate change is man-made, the justification of the individual’s criminal responsibility for its consequences under criminal law has so far posed almost insurmountable dogmatic difficulties. To establish individual criminal liability, not only German criminal law requires that the perpetrator’s act is causal for a certain result (in the scientific sense). Beyond that, a normative limitation of individual responsibility in the sense of “objective imputability” is required. For this, the perpetrator must create a legally significant danger resulting in the success of the act (in its concrete form). But, proving that the behaviour of an individual causes concrete climate damage in a causal and objectively attributable manner is difficult. While there are various scientific attribution models in climate science, these are not sufficient for the objective imputability theory of German criminal law. Even the first prerequisite of objective attribution – the creation of a legally significant danger – is questionable if one wants to capture the everyday behaviour of individuals. It is only the accumulation of all greenhouse gas pollutants in the atmosphere since the beginning of industrialisation (which in themselves seem to constitute harmless behaviour) that causes global climate change and its far-reaching, ultimately also individually harmful consequences. In summary, it can be said that the climate crisis, which is based on the cumulative emissions of mankind as a whole, is difficult to grasp with the dogmatic system of criminal law.

2. The social utility of climate-damaging behaviour

The considerable societal benefit of climate-damaging behaviour and its supposed inevitability also make the applicability of criminal law seem incapable of consensus from the outset. Society is obviously unable to force itself to fight something that is useful and necessary – at least in the short term – especially if this were to reduce its competitiveness in global comparison¹⁰ and given that subsequent climate damage is by no means immediately noticeable worldwide.¹¹ Since the beginning of industrialisation, climate-damaging behaviour has become part of the central

¹⁰ cf. *Mégret*, Columbia Journal of Environmental Law 2011, p. 214; *Elmer/Bradke/Faulstich/Nabitz*, Wirtschaftsdienst, Vol. 96 (9), p. 667; *Elmer/Bradke/Faulstich/Nabitz*, Wirtschaftsdienst, Vol. 96 (9), p. 667.

¹¹ *Field et al.*, Technical summary, in: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 2014, p. 40.

foundation of the global economic order. In the German legal system, the social utility of climate-damaging behaviour is limited by administrative law.¹² For example, the emission of greenhouse gases is taxed and there is a so-called emissions trading system (also at the European level), meaning that companies need a permit for the emission of greenhouse gases, which is issued or auctioned by the state. Criminal law can be ascribed only a supplementary function in that it covers particularly serious violations of the administrative regulations. Correspondingly, and this is key, the emission of greenhouse gases is not punished as a matter of principle, but only if it exceeds what is permitted under administrative law. In this case, criminal law can only be conceived as an accessory to administrative law.¹³ For this reason, it is partly condemned that the object of protection in these cases is not intrinsically linked to the matter of climate itself, but rather to climate as shaped through administrative law.¹⁴ It is therefore not surprising that climate criminal law has so far not played a central role in science and legislation, as it is unable to set any independent preventive and regulatory impulses.

V. Central justifications of Climate Criminal Law

Despite these fundamental objections, criminal law will not be able to ignore the issue of climate protection in the long term and may even have to assume a far more prominent role than we can suspect today. Above all, it is the following central considerations that make the combination of criminal law and climate protection seem possible and, in the end, even indispensable:

1. The global atmosphere as the starting point for the protected interest and the offence of climate criminal law

A necessarily holistic view opens up possibilities to go beyond a traditional understanding of criminal law and to envisage new constructions of (criminal) legal protection which consider the inherent globality of the phenomenon of climate change.

a) Reorientation of the legal object of protection and the relevant consequence of the offence

In Germany and many other countries, a criminal law norm is considered legitimate (according to most academic opinions) if it protects a certain legal interest, a so-called protected good. In view

¹² *Krell*, Umweltstrafrecht, 2017, p. 8.

¹³ *Frisch*, GA 2015, p. 437; critically *Mégret*, Columbia Journal of Environmental Law 2011, p. 221.

¹⁴ Along the same lines concerning the protected interest of the environment *Ransiek*, in: *Kindhäuser/Neumann/Paeffgen*, StGB, 5th ed. 2017, Introduction to §§ 324 et seq. margin no. 12; see also *Mégret*, Columbia Journal of Environmental Law 2011, p. 221.

of the manifold and – despite increasingly precise climate science methods – hardly assessable consequences of climate change, it stands to reason that an effective climate crime law should recognise the greenhouse gas concentration in the atmosphere as a protected good as such. Ultimately, such an offence does not protect elementary individual rights such as life or health, but the atmosphere as such. It also seems convincing not to focus on the (German) local greenhouse gas concentration, but to consider the globally averaged concentration. The global mixing of greenhouse gases due to their long residence time in the atmosphere argues in favour of understanding the climate as a globally uniform system and therefore not considering the concrete local composition of greenhouse gases on a delimited territory, but the globally averaged greenhouse gas concentration as a protected good.¹⁵

Although this approach constitutes the atmosphere as a new type of protected good, it does have similarities with already recognised goods in traditional criminal law, such as the protected goods of “soil”, “water” or “air” in German environmental criminal law.¹⁶ The existing German environmental criminal law, which protects individual environmental goods in their function for humans, does not cover the emission of greenhouse gases in its offence of air pollution. However, the atmosphere should not be included in the canon of environmental offenses as just another “environmental medium”. Rather, the atmosphere, as a basic prerequisite of the earth’s ecosystem, is structurally upstream of the classical environmental media themselves. Classic environmental media regularly have a transnational character by their very nature. However, the main difference between climate and environmental criminal law is that only climate criminal law provides for a genuine global object of protection.

b) Pollution of the atmosphere as an offence

If the atmosphere is the object of protection of a climate criminal law, any pollution of the atmosphere (*positive* emissions¹⁷) could theoretically be considered a possible offence. This includes

¹⁵ *Much*, in: *Kluth, Smeddinck*, Umweltrecht - Ein Lehrbuch, § 6 margin no. 4; *Halfmann*, in: *Schilbach, Halfmann*, Wissen, Wissenschaft und Global Commons, 2012, p. 133: „Die Atmosphäre als schützenswertes Gemeinschaftsgut zu verstehen, ist eine politische Zuschreibung, sie als globalen Sachverhalt zu deuten, eine wissenschaftliche Konstruktion.“ (Translation: Understanding the atmosphere as a common good worth protecting is a political attribution, interpreting it as a global fact is a scientific construction.)

¹⁶ An example are the environmental offences in German Criminal Law which protect the more “immediate” legal interests, and in particular air pollution as criminalised in § 325 StGB, see *Frisch*, Strafrecht und Klimaschutz, GA 2015, p. 435; hence, according to the prevailing view, environmental criminal law directly protects these environmental media without having to link a harmful act of an individual with a concrete consequence resulting from environmental pollution, e.g., for human health, see i.e., *Saliger*, in: *Satzger, Schluckebier, Widmaier*, StGB, 4th ed. 2019, Introduction to §§ 324 et seq., margin nos. 11 et seq.

¹⁷ *Solomon et al.*, Technical Summary, in: Climate Change 2007 (fn. 1), pp. 23 et seq.

both the release of greenhouse gases and the interference with natural sinks, for example in the form of deforestation. Further consideration could also be given to the protection of the atmosphere under criminal law through upstream and downstream criminal offences, for example penalising the extraction of fossil fuels (as an abstract endangerment offence¹⁸) or the subsequent consumption of products provided in a way that is harmful to the climate.

However, all these considerations do not absolve us from carefully examining the punishability and need for punishment of individual climate-damaging behaviours. The fundamental requirements of the rule of law, in particular the principle of proportionality and the principle of *ultima ratio*, must always be respected.

c) Increase of average greenhouse gas concentration as the core of the relevant behaviour

Given these considerations on the atmosphere as the subject of protection, it only seems conclusive to assume that the relevant effect of any “climate offence” should be the increase of the average greenhouse gas concentration, leading to climate change itself (climate damage). Such a normatively relevant increase is ultimately only given if, at the time of the offence, the burden on the atmosphere has not already been adequately compensated (*negative* emissions¹⁹). Therefore, an overall balancing of positive and negative emissions seems to be necessary to establish the final consummation of the offence, which also seems to be able to account for the cyclical nature of the global climate system. It should be noted that the basic obligation to compensate does not carry a judgment or decision on the specifics of the compensation (by whom, in which form?). Thus, a comprehensive climate criminal law could and would probably lead to at least a partial state-takeover of compensation.

d) Causality and attribution

It is relatively easy to prove causality between the individual’s pollution of the atmosphere (act) and the increase in the average greenhouse gas concentration (result) – any uncompensated pollution of the atmosphere is in itself causal.²⁰ As already indicated, German criminal law also requires objective attribution, i.e. the creation of a legally relevant danger resulting in the constituent

¹⁸ Satzger, NStZ 1998, p. 114.

¹⁹ These include, in particular, afforestation, and carbon dioxide removal in the form of CO₂ capture and storage, see Gasser/Guivarch/Tachiiri *et al.*, Nature Communications 2015, Vol. 6, p. 7958; Minx/Lamp/Callaghan *et al.*, Environmental Research Letters 2018, Vol. 13 (6), pp. 1 et seq.

²⁰ Even if, in view of the multitude of conduct that is harmful to the climate, recourse to the legal figure of cumulative causality intuitively suggests itself, such a conception does not depend on it; on cumulative causality see Wessels/Beulke/Satzger, Strafrecht Allgemeiner Teil, 52th ed. 2022, margin no. 231.

success.²¹ In particular, the first requirement of risk-creation must be given substantial consideration in the context of climate criminal law, since, for example, greenhouse gases are also inevitably released during the natural vital functions of humans (e.g. through breathing). The penalisation of such behaviour would be clearly disproportionate and would be seen as a clear violation of the *ultima ratio* principle, so that restrictions would have to be made here in order to preserve the rule of law.

On the one hand, climate impacts that are to be classified as “neutral” actions with regard to anthropogenic climate change, are to be excluded from attribution. These are behaviours that have always been part of human life and thus also part of the natural greenhouse effect and are therefore not the cause of what is understood as anthropogenic climate change. On the other hand, only slightly invasive, everyday private behaviour would need to be excluded from climate criminal law. As an adaptive system, the limits of such normatively shaped pertinence could well shift as the “climate crisis” intensifies. Considering the greenhouse gas potential of the positive emissions, currently trivial acts, such as lighting a match or keeping a pet, may not pass the attribution test in the future.

e) Interim conclusion

The concept of a possible criminal law on climate change outlined here breaks new ground both dogmatically and in terms of legal policy. From the perspective of the rule of law, it is of course problematic that we propose to shift criminal liability forward („Vorverlagerung der Strafbarkeit“). In principle, I am most sceptical of such a far-reaching shift. Yet, with regards to the immediate, unprecedented threat posed by the ever-worsening “climate crisis”, science and legislation should not reject such a shift from the outset. On the contrary, it is precisely the task of jurisprudence to explore new ways of bringing together effective (criminal) climate protection and the rule of law.

2. “Climate neutrality” and the necessity of a criminal law approach

In the long term, the objection of the social usefulness of climate-damaging behaviour will also not be able to assert itself as an obstacle for the creation of a comprehensive climate criminal law if the “climate crisis” continues to worsen.

²¹ Such “objective attribution” theories have a strong normative and doctrinally detailed position in German criminal law, cf. *Wessels/Beulke/Satzger*, *Strafrecht AT* (fn. 21), margin no. 253.

a) The goal of “climate neutrality”

The more threatening (and costly²²) climate change becomes, the more likely it seems that drastic steps will be taken to effectively prevent climate-damaging pollution. What is astonishing here is that neither the legislator nor (criminal) jurisprudence seem to have noticed that such a departure from the utility-objection has already taken place. Even more so: the use of criminal law to prevent climate change is already emerging today in the goal of “climate neutrality” as a pillar of (inter-)national climate policy and has already been globally agreed upon as a legitimate means, should the “climate crisis” continue to worsen.

The legally non-uniformly defined state of “climate neutrality” has long been regarded by climate scientists as the goal to be achieved worldwide to overcome the “climate crisis” and essentially describes a balanced state between positive and negative emissions, so that the greenhouse gas concentration in the atmosphere is not increased in the long term (“net zero”). In addition to legally binding implementations in a few progressive countries, the EU’s recently adopted climate law also provides for legally binding “climate neutrality” by 2050.²³

Furthermore, the Paris Agreement aims to achieve climate neutrality in the second half of the 21st century. The states signatory have agreed on the legally binding target of maximum global warming of “well below 2°C”. This ultimately results in a legal obligation for the Parties to refrain from any uncompensated emissions (“net zero”) once the warming maximum has been reached – or considerably earlier in order to achieve the global climate target.

Taiwan, although not legally bound by the Paris Agreement, has also declared its intention to follow the international trend to reach climate neutrality by 2050.²⁴

b) The prohibition of uncompensated positive emissions as a legalisation of climate neutrality

The legal conceptualisation of climate neutrality has not been thought through in detail so far. Rather, the focus of international and national climate policy has been on the reduction of greenhouse gas emissions by means of public-law control mechanisms, in particular through taxation of climate-damaging behaviour and emissions trading. The binding goal of climate neutrality

²² Glanemann/Willner/Levermann, *Nature Communications* 2020, Vol. 11, pp. 1 et seq.

²³ Proposal for a Regulation of the European Parliament and of the Council establishing a framework for achieving climate neutrality and amending Regulation (EU) 2018/1999 (European Climate Change Act), COM (2020) 80 final, 4th March 2020. The Permanent Representatives Committee meeting on 5th May 2021 led to a final compromise text with a view to agreement, cf. Interinstitutional File 2020/0036 (COD).

²⁴ See Taiwan’s Pathway to Net-Zero Emissions in 2050, National Development Council, <https://www.ndc.gov.tw/en/> (last accessed 8/23).

introduces a necessary paradigm shift in the legalization of climate protection. As uncompensated emissions will no longer be possible in the legal state of climate neutrality, the necessity of using criminal law to achieve the binding global climate goals becomes apparent: a fundamental ban on all uncompensated emissions will then be required.

Legal climate neutrality, however, does not necessarily indicate an absolute ban on climate-damaging behaviour, but rather requires the design of a more flexible climate protection concept, away from current reduction mechanisms and toward sustainable compensation mechanisms. Thus, public law control mechanisms in the form of taxation and budgeting can continue to be part of a comprehensively conceptualised climate penalty law, for example through the state organisation of individual compensation payments through a sustainable tax policy.

c) Result

Regarding the construction of a future climate criminal law, an essential differentiation must be made at the temporal level: Once the legal state of climate neutrality is realised, there will be *a fundamental prohibition of any climate-damaging behaviour*. Violations of this prohibition can ultimately be recorded under criminal law. However, before the legally binding agreement of climate neutrality, the so-called *transition phase*, the emission of greenhouse gases is *generally permitted and is only regulated by administrative law*. Criminal prosecution can nonetheless not be ruled out in this phase.

VI. (Inter)national Climate Crimes: Global jurisdiction and transnational cooperation

If one recognises the *global* atmosphere as a legitimate object of protection of a (national) climate crime, the question of jurisdiction inevitably arises which will obviously provoke political problems.

1. Criminal application law / Jurisdiction

According to the principle of territoriality²⁵ recognised by international law, a state can extend its criminal jurisdiction to all acts that occur on its territory, whereby – as in most legal systems – both the place of commission and the location of success within the country are sufficient for this purpose.

²⁵ Satzger, Internationales und Europäisches Strafrecht, 10th ed. 2022, § 4 margin no. 6 et seq. (territoriality principle).

A nation state could only extend its punitive power regardless of the place of commission, if the principle of universality²⁶ applies: For this to happen, globally recognised standards must exist, in particular, an international treaty or customary international law which establishes certain acts and achievements to be punished worldwide. The application of this principle is, of course, limited to a few severe crimes, which include in particular the core crimes of international criminal law.²⁷ At present, however, there is probably no such globally recognised core offense for either environmental crimes or climate crimes, so that an extraterritorial application of a climate criminal law under the headline of universality principle seems (still) unlikely.

Since the constituent success is to be seen in the increase of the average greenhouse gas concentration in the atmosphere, the location of success is of global nature.

Thus, coming back to the internationally recognised principle of territoriality, a further consideration would be to assume *global* jurisdiction by establishing a truly *global* place of success. For this to be the case, it would have to be possible to prove that the effects of climate offences – the increase in the average concentration of greenhouse gases in the atmosphere – at least also occur on the territory of the penalising state.

The sovereign territory of a state also includes the airspace above its land mass. Though the specific height of the airspace covered is disputed under international law, it undoubtedly includes the two layers relevant to climate change, the troposphere and the stratosphere.²⁸ Since air and atmosphere describe the same thing from a scientific point of view, it would be contradictory if a state was allowed to protect the air circulating above its territory under criminal law but not the parts of the atmosphere. As a result, if one applies the well-known principle of territoriality to climate criminal law, it in principle seems possible to also assume its global application and jurisdictional competence on the basis of the *global* place of violation.

2. Sovereignty conflicts and climate justice

A global responsibility solution, however, reveals significant sovereignty conflicts: Since the beginning of industrialisation, greenhouse gas emissions have served economic progress – for a long time without (at least known) consequences for humans and their habitats. In the context of climate

²⁶ *Ambos*, Internationales Strafrecht: Strafanwendungsrecht, Völkerstrafrecht, Europäisches Strafrecht, Rechtshilfe, 4th ed. 2019, § 3 margin no. 95; *Satzger*, Internationales und Europäisches Strafrecht, (fn. 26) § 5 margin no. 77.

²⁷ *Satzger*, Internationales und Europäisches Strafrecht (fn. 26), § 4 margin no. 14; *Ambos*, in: MüKo/StGB, 4th ed. 2020, Introduction to § 3 margin no. 53.

²⁸ Cf. *Krajewski*, Völkerrecht, 2nd ed. 2020, § 7 margin no. 29; *Herdegen*, Völkerrecht, 19th ed. 2020, § 24 margin no. 4.

justice, special consideration must be given to the inequality between industrialised and developing countries. Penalising extraterritorial climate-damaging behaviour could impair and possibly even prevent the industrialisation process of developing and newly industrialising countries, leading to an understandable accusation of neo-colonialism. Moreover, penalisation could be used as an illegitimate tool in the war for resources and the use of fossil fuels, perpetuating the economic dominance of industrialised countries. The potential for abusing global jurisdiction is thus obvious.

Although such scenarios may seem dystopian at present, global jurisdiction does not seem too hypothetical in the near future due to different legal and factual circumstances regarding climate change in individual states.

There are therefore considerable doubts about the legitimacy of such a far-reaching encroachment on state sovereignty. Current international law seems unable to cope with the inherently global nature of climate. The compatibility of efficient climate protection under criminal law, state sovereignty, and the implementation of climate justice thus describes a considerable area of tension that criminal law scholarship and practice must address in a timely manner.

VII. Conclusion: Balancing national criminal law and global cooperation as the path to Climate Criminal Law

In summary, the establishment of an *international offence of “crime against the environment”* is most welcome, yet both dogmatically and politically difficult to realise. Thus, this can only constitute a solution “in the long run”. The focus is therefore on national criminal law, in the EU potentially harmonised by European law: In the much-proclaimed legal state of climate neutrality, effective climate protection and climate criminal law belong together. Legislators, legal practice and jurisprudence must become aware of the role of criminal law in the prevention and mitigation of climate change, a role that has hardly been perceived so far. The rapid escalation of the “climate crisis” gives rise to fears that, if they were not to be addressed soon, hasty, undogmatic, may ultimately produce illegitimate conclusions and implementations.

In addition, there is a risk that with increasing state restraint, more and more individuals may feel called upon to draw attention to the issue. This may entail breaches of the legal system. A phenomenon which is already occurring: In many European countries, climate activists invoke a supposed “civil disobedience” or claim that their behaviour is justified and required by “climate emergency”. Against this backdrop, they glue themselves to streets in order to disrupt car traffic and draw attention to their climate policy demands.²⁹ Others publicly smear memorials or deface

²⁹ <https://www.nytimes.com/2023/01/02/world/europe/climate-activists-germany-stop-traffic.html> (last accessed 8/23). <https://www.washingtonpost.com/world/2023/04/24/germany-climate-protests-berlin-road-blocks/dbd7>

paintings in museums with the same intention. Even though it seems obvious that punishing climate activists under the offence of “forming criminal organisations”, as some have called for, is not convincing in terms of criminal policy, the question arises to what extent criminal law can and may be a solution in the context of climate activist happenings. German criminal courts are already occupied by discussions whether national criminal law can be brought into play against those who are currently resisting the state’s inaction regarding the climate crisis with – often dubious (pacific?) – means. So far, these are isolated, though not entirely rare, cases. It seems obvious that there is no “one size fits all” solution, but that a decision has to be made on a case-by-case basis. As of now, the development of a clear jurisprudence of the highest court on the criminal liability of climate activists still has to be awaited.

Increased recourse to prohibitions under criminal law leads, even in an area as important as climate protection, to serious restrictions of central individual liberties. Of course, this is only acceptable as a last resort (*ultima ratio*) and – despite innovative and interdisciplinary consideration – only with the inclusion of rule-of-law control mechanisms of a liberal criminal law doctrine. ♣

(本文已授權收錄於月旦知識庫及月旦系列電子雜誌 ● www.lawdata.com.tw)

On the AIGC Protection and Regulation in the Era of Generative AI – From DABUS to Goldsmith and Beyond

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Abstract

The emergence of ChatGPT not only led to the explosive growth of the generative AI, but also revolutionized the interaction between humans and AI. The large amount of AI generated content (AIGC), however, has also led to some basic copyright issue disputes. In the past, these AI-related copyright issues have been limited to scholarly discussions. But the U.S. Copyright Office's decision on DABUS and Kashtanova, its promulgation of the Copyright Registration Guidelines covering AI-generated content, and the courts' decisions in DABUS and Goldsmith provide a preliminary answer to AI-related copyright issues. This article starts from these cases and the Copyright Office's Guidelines, follows by the discussion of the measures taken by AI companies to deal with legal risks, so that readers can have a clearer understanding of the protection of copyright in the generative AI era.

Keywords: Generative AI, AIGC, Copyright, Fair Use, DABUS

Personal Data Protection Related to the Use of AI ChatGPT

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Abstract

Generative AI ChatGPT be known as the most noteworthy technological development in the first half of 2023. According to user's question or operating instruction, Generative AI ChatGPT can output article-style response, or complete reports about reading experience, event planning, make a picture etc. It has changed the way of people work and learn. At the same time There are many risks those will threaten human rights, social order, copyright, etc. This article first explain the risks caused by using generative AI ChatGPT, and international countermeasures, Then the issues related to Personal data protection Act when generative AI ChatGPT is exploited, and introduces the precautions issued by the Japan Personal Information Protection Commission.

Keywords: AI ChatGPT, Personal Data Protection Act, Large Language Model, Hiroshima AI Process, Personal Information Protection Commission

An Overview of the Regulatory Challenges and Responses of ChatGPT in the US Law

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Abstract

ChatGPT leads a new wave of public attention to artificial intelligence (AI) development. The characteristics of ChatGPT, namely the large scale of models and training data, the generality applicable for different purposes, the ability of prediction based on past data, and its credibility to generate content, cause new regulatory challenges. Compared with the EU law that gradually legislates over AI, US federal law has been representing a different paradigm, which takes the sectoral and soft regulations approach. Despite the scientific and civil community's robust debates over the risks of ChatGPT, the legislation of this emerging technology does not reach political consensus but can only form professional self-regulation. Legal issues raised by ChatGPT, such as personal data protection or the liability of false content, can reveal the current law's limit and the necessity of reconsidering it. This article reviews the US AI law and policy and the regulatory challenges and responses brought by ChatGPT, which could also serve as a reference to our ongoing discussion over forming our domestic AI regulatory framework.

Keywords: ChatGPT, Artificial Intelligence, Generative Artificial Intelligence, Personal Data Protection, Platform Liability

Renovation of the Procedure in the Second Instance

— Construction of the Pyramidal Structure of the Court System in the Second Instance

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Abstract

Civil Procedure Rules in Taiwan have been undergoing mandatory reforms for more than 20 years since 2000. The issue of how to construct the second instance, which is in the middle of the pyramidal litigation structure, towards a restrictive continuous hearing system which can further make the first instance become the center of the trial of facts and the trial in the third instance a discretionary review, is relevant to the protection of the right to litigation and the stable development of the judicial system. In order to shed light on the structure of the future second instance trial, this article will review on the reforms adopted in the draft of the amendment to the Civil Procedure Rules of 2020, which includes mandatory presentation of the grounds for appeal, preclusion in preparatory proceeding by exchange of pleadings, restraint on amendment and supplement of pleadings and counterclaims, and limitation on presenting new means of attack and defense.

Keywords: Restrictive Continuous Hearing System, Mandatory Presentation of the Grounds for Appeal, Preclusion, Collateral Estoppel, Limitation on Presenting New Means of Attack and Defense

ESG and Director's Duty of Oversight

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Abstract

What is the relationship between ESG and director's fiduciary duty, especially the director's duty of oversight? In the event a company violates ESG-related responsibilities, such as food safety, environmental protection, consumer rights, etc., aside from potential contractual or tort liabilities towards victims, would directors also be held liable for breach of their oversight duties and subsequently obligated to bear liability for damages? This article will outline a series of rulings by Delaware courts in the United States since the Marchand case in 2019, analyze cases regarding director's oversight duties in Taiwan, and provide with suggestions concerning the scope of directorial ESG oversight duties, the business judgment, and the governance framework for ESG oversight duties.

Keywords: ESG, Duty of Oversight, Duty to Monitor, Caremark Claim, Fiduciary Duty, Legal Compliance

such as the application of the principle of purpose restriction, the requirements for utilizing emerging technologies for automated processing, and the design of corresponding supervisory procedures. To act in concert with the current legal system in Taiwan, preliminary observations and suggestions will be proposed at the end of this report and looking forward to providing reference for further open discussion.

Keywords: Police, Police Power, Technology Law Enforcement, Automated Data Analysis or Evaluation, German Federal Constitutional Court, Principle of Purpose Restriction, Principle of Purpose Change, Principle of Proportionality

Corporate Punishments and Corporate Compliances in the United States

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Abstract

This article illustrates the various types of corporate punishments and its contents, including corporate compliance, and ethics, probation, restitutions, and compensations. It can be divided into two categories: criminal penalty and no criminal penalty. Each has its function, goal and the mean to which the punishment could be achieved through both ways to transform the corporate into a better, non criminal-oriented organization and shape its good corporate culture.

Keywords: Corporate Penalty, Corporate Compliance and Ethics, Organizational Sentencing Guidelines, Criminal Compliance

When Does an Expression of Intent Inter Absents Reach the Other Party?

— A Comparison between Taiwanese and Japanese Law on the Legal Effect of Registered Mail Claim

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Abstract

According to the civil ruling No. 908 of the Grand Court issued in the year of 2020, the expression of intent by the party shall be deemed to have been achieved when sending it by registered mail to the opposing party's place of residence and the postal authorities make a claim notification for pickup without meeting the opposing party in person. Even if the mail is subsequently returned due to an expired claim period, it should still be considered that the expression of intent was accomplished when the claim notification was issued. This article agrees with this view. Compared to Japan's postal service, Taiwan's claim notification lacks information about the "sender and contents of the mail," which somewhat undermines the protection of the opposing party. However, since Taiwanese postal authorities already provide services such as redirection and temporary mail storage, the risk of not being able to physically receive the mail should be transferred to the opposing party. Nevertheless, the article believes that since the opposing party has the right to go to the post office to claim the mail at any time after receiving the claim notification, the legal effect of the expression of intent should not take place until the deadline for claiming the mail.

Keywords: Reach, Registered Mail Claim, Expression of Intent Inter Absents, Expression of Intent Inter, Registered Mail

The Crime of Attempt Trade Secrets and Unlawful Means: A Discussion about Reverse Engineering

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Abstract

After its amendment in 2013, the Trade Secrets Act of Taiwan introduced criminal penalties for acts that infringe upon trade secrets under Article 14-1. Although this design of subsidiary criminal law seems to align with the contemporary trend in our country, it still raises the question of whether the state's administrative regulation excessively relies on criminal law. On the other hand, the discussion on the secrecy requirement, one of the three elements of trade secrets, has recently faced challenges regarding the "reverse engineering defense." This perspective has been acknowledged by legal doctrines in the United States and Germany, as well as some judicial practices in our country. Overall, this article agrees that reverse engineering can serve as a defense for the secrecy requirement. However, regarding this recent development, it seems that our judicial practices still need to accumulate more judicial decisions to establish a clearer direction for future disputes in trade secret litigation.

Keywords: Trade Secrets, Ancillary Criminal Law, Secrecy, Reverse Engineering, Unlawful Means

The Principle of Indemnity and Insurance Subrogation — Centered on Medical Expense Insurance

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Abstract

According to the traditional theory, the principle of indemnity exists in damage insurance, which is a mandatory law in nature, and the insurance subrogation is a subordinate system with general binding effect. Although the medical expense insurance is a type of life insurance, it is also applicable because it has the nature of compensation of damages. However, with the emergence of the rationed medical expenses insurance and even the actual payment and rationed payment selective medical expenses insurance, the view that the actual payment applies while the rationed payment does not is obviously unreasonable for the same economic payment. But the view that it is not applicable, especially in the case of two types of choice, where the type of actual payment deemed to be a fixed amount payment, is the result theory from the angle of justice, and lacks the legal basis. Based on the latest theories, the author thinks that it is reasonable to divide the principle of indemnity into the narrowest sense, the narrowest sense and the broadest sense. Therefore, the view that there is mandatory law and arbitrary law is the most reasonable one. Ordinary damages insurance must apply insurance subrogation, whereas medical expenses insurance should be dealt with by contractual agreement as there is little possibility of moral risk occurring and should be understood as not applicable in the absence of agreement.

Keywords: Medical Expenses Insurance, Insurance Subrogation, The Principle of Indemnity