

# **Seven Steps to the Encyclical „Laudato Si“ by the Holy Father Pope Francis**

Presentation at the  
United Nations  
Climate Change Secretariat

14 August 2015, Bonn  
**Prof. Dr. Ottmar Edenhofer**



# **The Current Global Crisis: Climate Change, Poverty and Injustice**

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## **Step 1**

**The encyclical discusses climate change, poverty and inequality as the main ethical challenges of the 21st century. It is therefore inappropriate to reduce it to an environmental or climate encyclical.**

**The encyclical is fundamentally on Justice!**

# The Background of the Encyclical



**Pope Francis visits USA in September**



**G7 Summit in Germany in June**

Source: Bundesregierung/Kugler



**COP 21, Paris**



**UN SDG**

# Pacem in Terris addresses „all men of good will“ in a global crisis

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Source: CNS



**„Pacem in terris“ by Pope John XXIII**



**Cuba Crisis**

Source: berlin.de



**The Berlin Wall**

# The Global Commons Problem

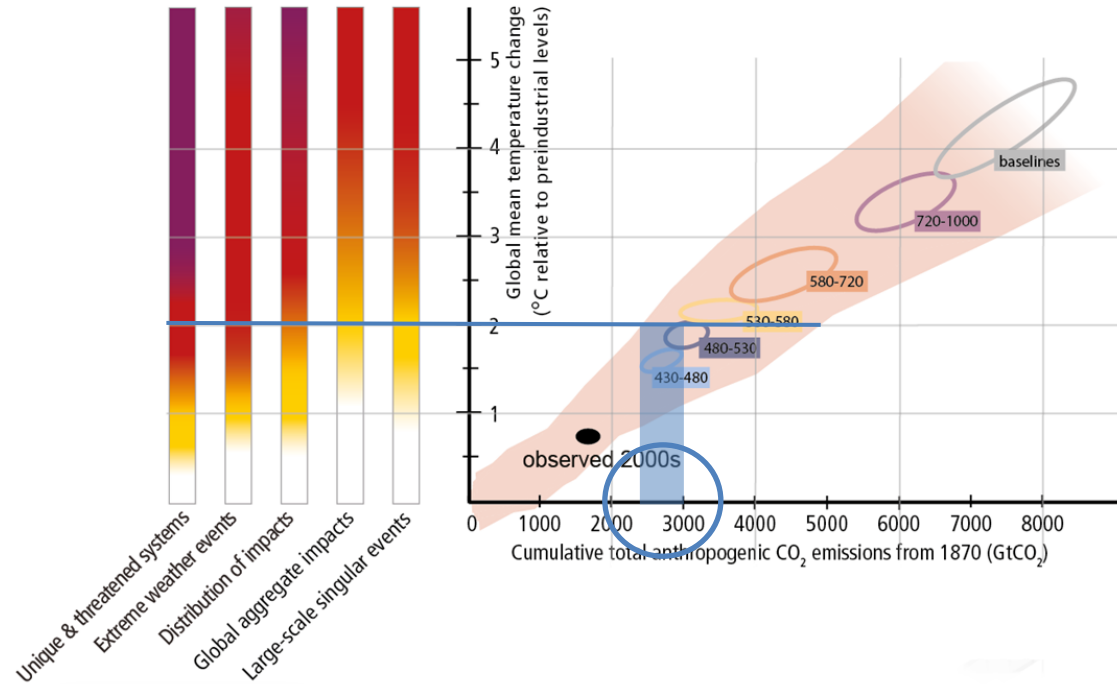
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## Step 2

**The encyclical identifies the atmosphere as a global common good, as the collective property of all humans.**

# The Synthesis of IPCC

Risks from climate change depend on cumulative CO<sub>2</sub> emissions...



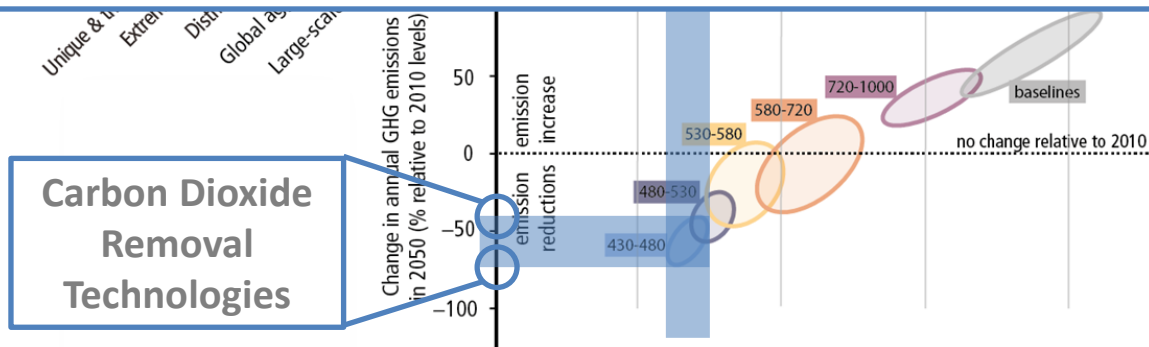
Based on SYR Figure SPM.10

# The Synthesis of IPCC

... which in turn depend on annual GHG emissions over the next decades.



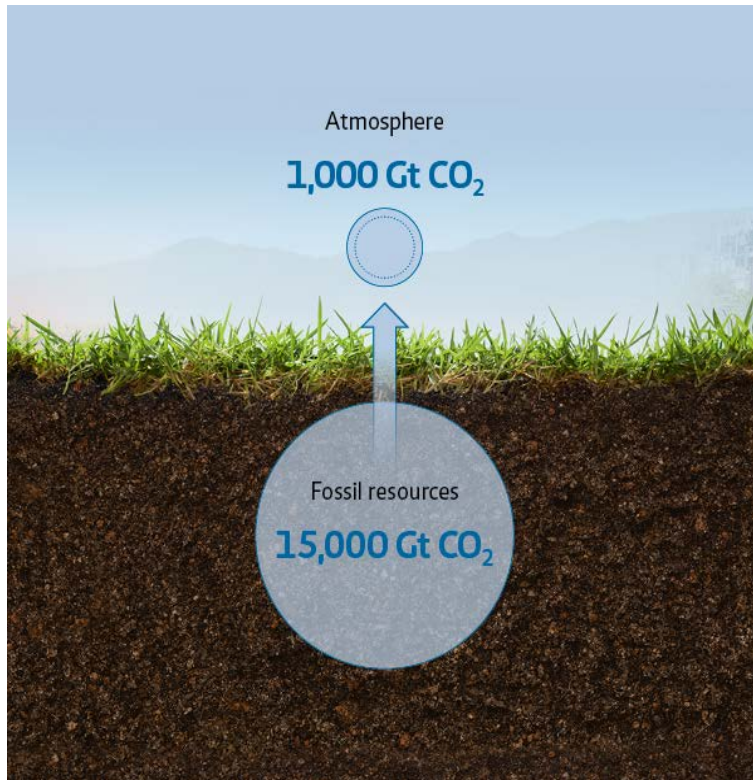
**Mitigation involves some level of co-benefits and of risks due to adverse side-effects, but these risks do not involve the same possibility of severe, widespread and irreversible impacts as risks from climate change.**



Based on SYR Figure SPM.10



# The Economics of Climate Change



## Resources and reserves to remain underground until 2100 (median values compared to BAU, AR5 Database)

Until 2100	With CCS [%]	No CCS [%]
Coal	70	89
Oil	35	63
Gas	32	64

Source: Bauer et al. (2014); Jakob, Hilaire (2015)

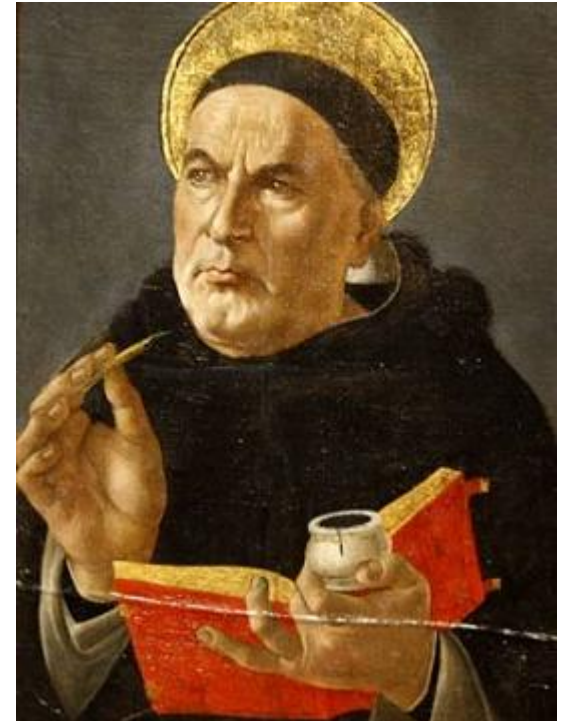


# The Common Destination of Goods

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“The principle of the **subordination** of **private property** to the **universal destination of goods**, and thus the right of everyone to their use, is a **golden rule of social conduct** and ‘the first principle of the whole ethical and social order’ [71]”, No. 93

[71] JOHN PAUL II, Encyclical Letter *Laborem Exercens* (14 September 1981), 19: AAS 73 (1981), 626.



St. Thomas Aquinas (1225-1274)  
*Summa Theologiae* II/II q. 66, a. 2.

# The Polluter Pay Principle and the Social Costs

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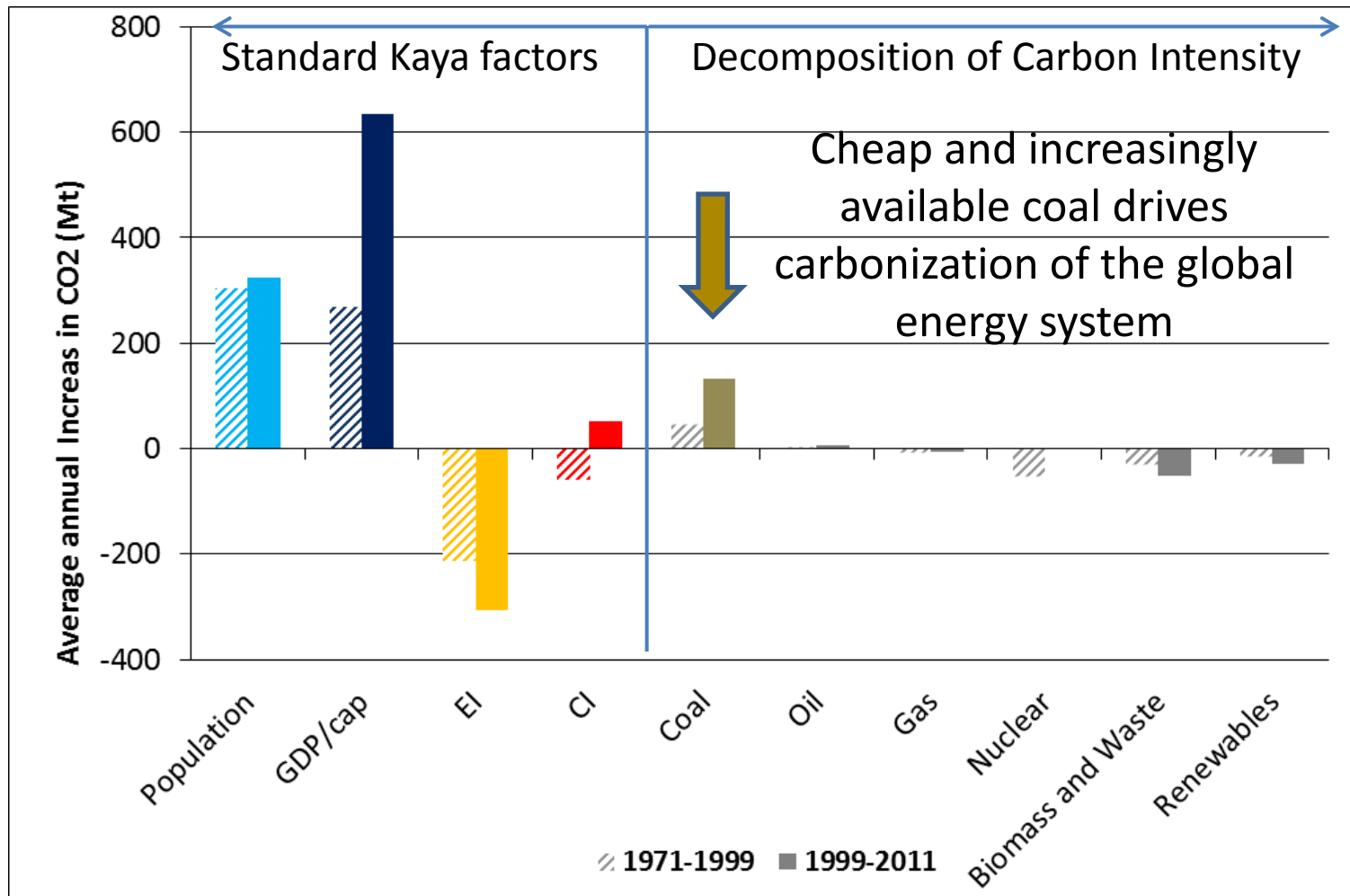
„Yet only when 'the economic and **social costs** of using up shared environmental resources are recognized with **transparency** and **fully borne** by those who incur them, not by other peoples or future generations',[138] can those **actions** be considered **ethical**." (LS 195)



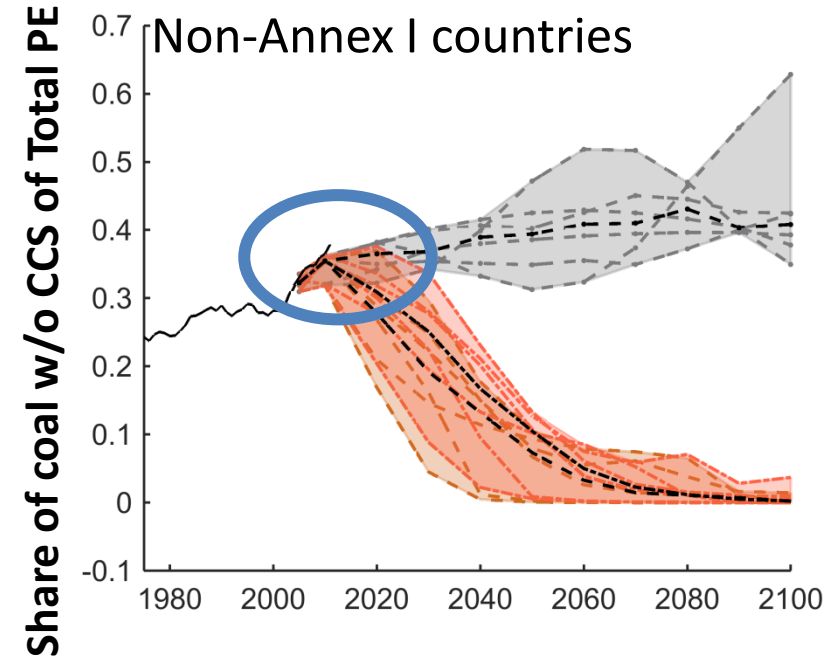
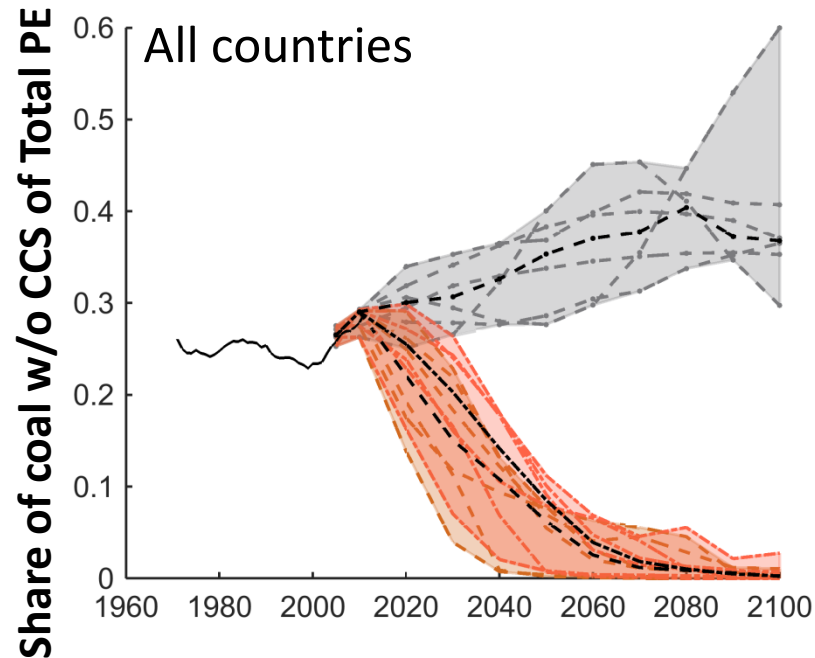
Arthur Cecil Pigou (1877-1959)

[138] BENEDICT XVI, Encyclical Letter *Caritas in Veritate* (29 June 2009), 50: AAS 101 (2009), 686.

# The power of the wrong prices – The renaissance of coal



# Renaissance of coal is majorly driven by poor, fast growing countries



Steckel, Edenhofer and Jakob, in press

- Non Annex I countries have increased their coal share in the energy mix **faster than foreseen in available baseline scenarios**
- Carbonization by coal is **not limited to China**, but applies structurally to poor, fast growing countries

# Will the next wave of carbonization be triggered by Africa?

Country	Average Emission Growth 2000 – 2011	Global rank	Due to changes in carbon intensity only	New mining activities planned	New coal power plants under construction/ planned
<b>Congo, Rep.</b>	17.5%	1	9.2%	N/A	Yes
<b>Benin</b>	11.2%	3	6.8%	N/A	N/A
<b>Angola</b>	10.9%	4	5.2%	N/A	Yes
<b>Tanzania</b>	9.5%	7	5.2%	Yes	Yes
<b>Sudan</b>	9.0%	9	7.4%	N/A	Yes
<b>Mozambique</b>	8.4%	10	5.2%	Yes	Yes

Calculations by MCC based on IEA data

Six Sub-Saharan African countries are among the top 10 fastest growing emitters globally. Until now, their carbonization is majorly driven by natural gas and oil.

**BUT:** Coal is getting increasing attention, also in countries w/o own reserves!

# **The Pope rejects misleading moral dilemmas.**

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## **Step 3**

**The Pope regards water shortages for the poor, the loss of biodiversity, the collapse of societies, and the aggravation of inequality as impacts of dangerous climate change.**



# Preferential Options for the Poor

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**Water availability**



**Sanitation**



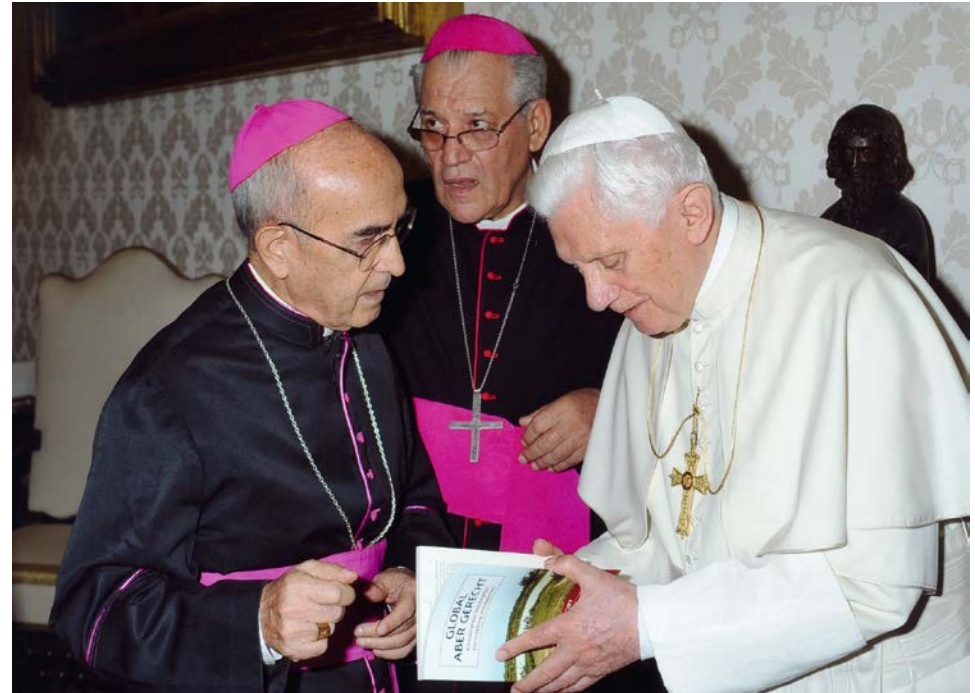
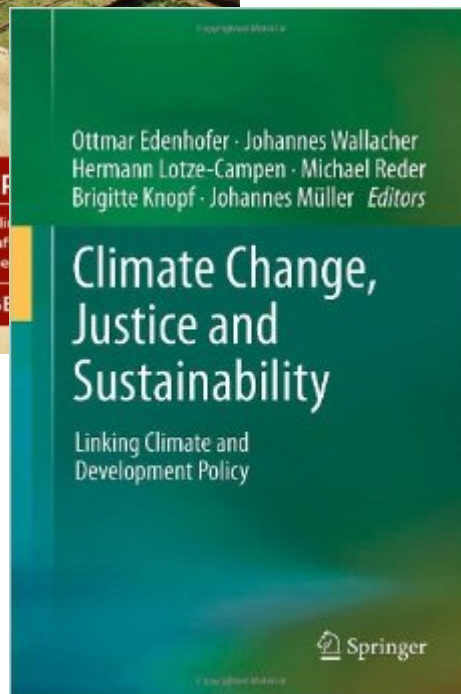
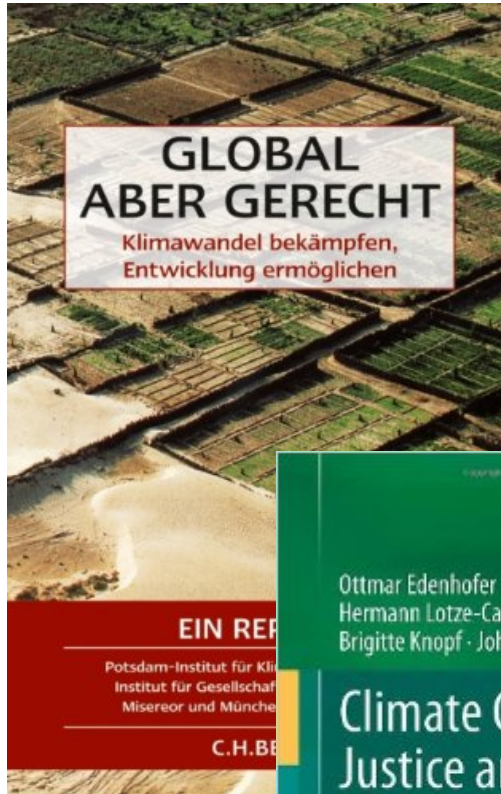
**Telecommunication**



**Access to electricity**

# Avoiding dangerous climate change and the eradication of poverty are no conflicting goals.

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**Pope Benedikt with Brazilian Bishops  
in 2011**

# The Common Good and Vested Interests

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## Step 4

**The encyclical exposes the denial of climate change as the veiling of power interests. Veiling, because the debate is not about scientific accuracy, but rather self-serving interests that are to be enforced against the common good.**

# Technological Power and Responsibility

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## Step 5

**The encyclical assesses technology largely positively, but it warns of technological determinism, technocracy, consumerism and fatalism.**

# Ethical decisions about the direction of technological change

Technology needs ethical deliberation and design, especially energy supply.



**Romano  
Guardini**

**Das Ende  
der Neuzeit  
Die Macht**

Grünwald/Schöningh



# Call for Stewardship at all relevant levels

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## Step 6

**The encyclical places the solutions of the global crisis at the levels of international cooperation, national policies, municipal governance, communities, families and the individual.**

**Laudato Si does not ask for a world government!**



## Against market based instruments? What the Laudato Si really says:

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“The strategy of buying and selling **‘carbon credits’** can lead to a **new form of speculation** which would not help reduce the emission of polluting gases worldwide. This system seems to provide a quick and easy solution under the guise of a certain commitment to the environment, but in no way **does it allow for the radical change** which present circumstances require. Rather, it may simply become a ploy which permits **maintaining the excessive consumption** of some countries and sectors.” (No. 171)

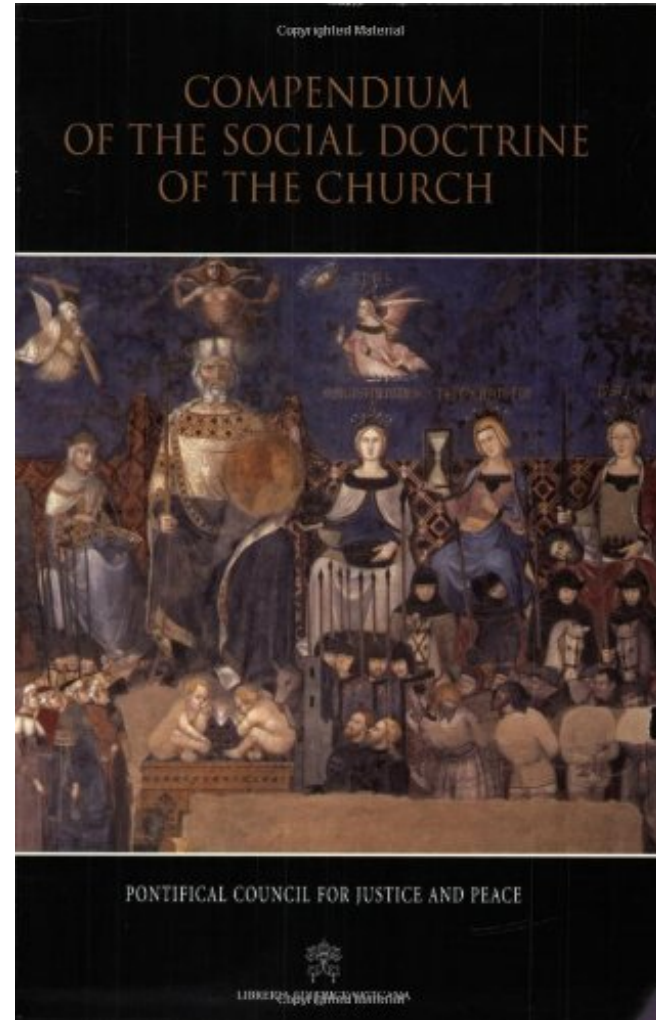
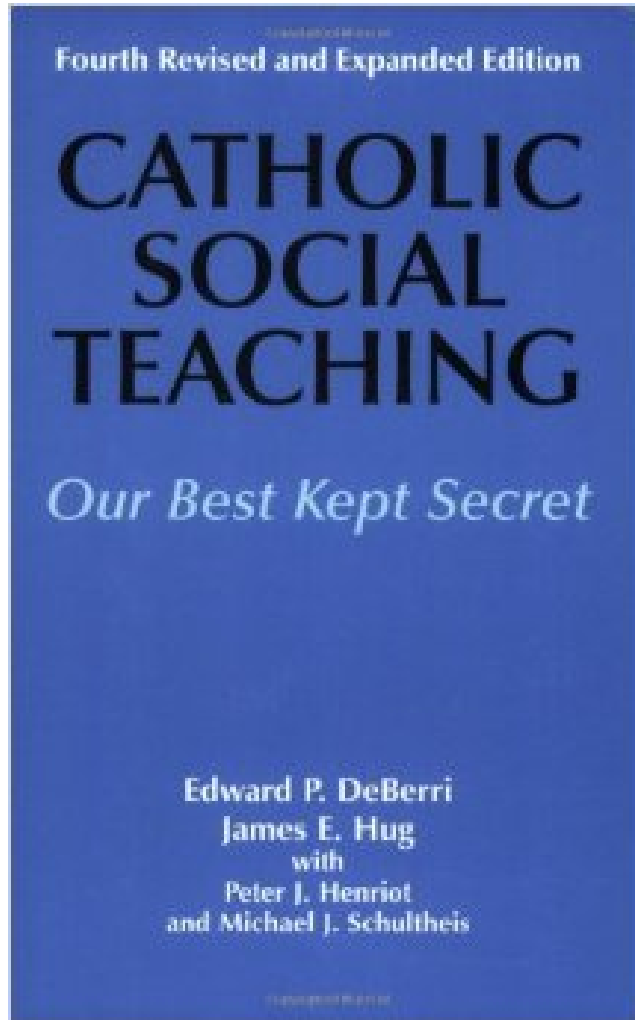
# How to understand the concrete recommendations and concerns in Laudato Si

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- Pope Francis refers to **reason** and not to faith when presenting his concerns on 'carbon credits' and **emissions trading**; **he does not claim technical competence**.
- Thus, **technical evaluation** of policy instruments within the encyclical should **not be understood** as a new **doctrine in the social teaching** of the Catholic Church.
- It is an **invitation** and engagement in a reasoned **debate** over how to **derive prudential** rules from the more **fundamental ethical principles** discussed in the encyclical.
- Climate **policy instruments** need an **evaluation** according to **justice, fairness, effectiveness and efficiency**.

# The Catholic Church could lift its best kept secret: The Catholic Social Teaching

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# Why Science needs Religion - Why Religion needs Science

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## Step 7

**The biblical narration of creation, fall, salvation and consummation is intended to open all Christians' eyes.**

**Human history is drama, not tragedy.**

# Distorted Relation to the Own Self, Others, God and Earth

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**Cain slaying Abel**

Peter Paul Rubens - The Courtauld Gallery, London

“Disregard for the duty to cultivate and maintain a proper relationship with my neighbour, for whose care and custody I am responsible, ruins my relationship with my own self, with others, with God and with the earth.”,  
Laudatio Si, No. 70