"How Laudato Si resonates with the G-20 agenda"
STEP ONE

No “Climate Encyclical”

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

June 2015
G7 SUMMIT
Germany

Sept. 2015
Francis visits USA

Sept. 2015
UN summit SDGs

Nov. / Dec.
2015
COP 21 Paris
November 2016:
US Presidential Election and COP 22
German G20 Presidency in 2017
STEP TWO

The Global Commons Problem

The encyclical identifies the atmosphere as a GLOBAL COMMON GOOD, as the collective property of all humans.
The Anthropocene
Humankind changes the planet – also the face of the Earth?

Difference between RCP 8.5 and RCP 2.6
LETTER

Global non-linear effect of temperature on economic production

Marshall Burke¹,², Solomon M. Hsiang³,⁴,⁵ & Edward Miguel⁴,⁵

Source: Nature, doi:10.1038/nature15725
Climate Projections and Associated Risks

Based on the SYR IPCC AR5; Slide by H. J. Schellnhuber

Level of additional risk due to climate change:
- Undetectable
- Moderate
- High
- Very high
The Synthesis of IPCC

Risks from climate change depend on cumulative CO₂ emissions...
"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"

71 John Paul II, encyclical letter Laborem Exercens, in Pope Francis, encyclical letter Laudato Si [93]
The climate problem at a glance.

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

<table>
<thead>
<tr>
<th></th>
<th>Until 2100 With CCS [%]</th>
<th>Until 2100 No CCS [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>70</td>
<td>89</td>
</tr>
<tr>
<td>Oil</td>
<td>35</td>
<td>63</td>
</tr>
<tr>
<td>Gas</td>
<td>32</td>
<td>64</td>
</tr>
</tbody>
</table>

Source: Bauer et al. (2014); Jakob, Hilaire (2015)
The 2°C budget does not leave any leeway

Cheap and abundant coal is the driver of a „re-carbonisation“ of the energy system in some parts of the world

*All budgets are subject to considerable uncertainty, see Edenhofer et al. (2016)
“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’\textsuperscript{138}, can those actions be considered ethical.”

\textsuperscript{138} Pope Benedict XVI, encyclical letter \textit{Caritas in Veritate}, in Pope Francis, encyclical letter Laudato Si [195]
The Queen of Subsidies

Social costs vs subsidies

“one ton of CO\textsubscript{2} receives, on average, more than 150 US$ in subsidies”
STEP THREE
The Pope rejects misleading moral dilemmas.

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.
The challenges for the G20

- Overuse of the global commons
- Underprovision of public infrastructure
Preferential Options for the Poor

WATER AVAILABILITY

SANITATION

TELECOMMUNICATION

ACCESS TO ELECTRICITY
Projected cumulative infrastructure demand

2014 US$, trillions

- Telecommunications
- Water & sanitation
- Transport
- Energy

Projected demand 2015-2030

- Low income countries
- Lower middle income
- Upper middle income
- Lower high income
- Upper high income countries

Bhattacharya et al. (2016)
Carbon pricing along common but differentiated responsibilities

Carbon pricing (with taxes or emission trading systems) is essential because of the oversupply of fossil fuels.
Carbon pricing revenues are sufficient to finance universal access to infrastructure except for roads where Africa’s & Latin America’s costs still partially exceed revenues.

Jakob et al. (2016)
Available Now!

www.mcc-berlin.net/klimabuch
STEP Four
Why Science needs Religion - Why Religion needs Science

The biblical narration of CREATION, FALL, SALVATION and CONSUMMATION is intended to open all Christians’ eyes.

Human history is drama, not tragedy.
The encyclical has facilitated a debate outside the Church unprecedented in history.


http://www.thinkingfaith.org/articles/laudato-si%E2%80%99-concern-our-global-commons