

Planetary Accounting

Kate Meyer • Peter Newman

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Quantifying How to Live Within Planetary
Limits at Different Scales of Human Activity

 Springer

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ISBN 978-981-15-1442-5 ISBN 978-981-15-1443-2 (eBook)
<https://doi.org/10.1007/978-981-15-1443-2>

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Dedicated to Kate's children Patrick and Hazel and Peter's grandchildren Josie, Lilah and Benji. We hope planetary accounting will help to create a healthier planet for your generation.

Preface

There is a lot of science in this book, but a lot of other stuff too. We both know that science is really important to the issues we are addressing but each of us has lived in other realms of life, where we have learned a lot of “other stuff”. I have a PhD in Chemistry, studied Environmental Science, and in 2018/2019 was named as Western Australian Scientist of the Year. Kate is a Mechanical Engineer and has just completed her PhD. So, we qualify to address the scientific issues, and we spent a lot of time working to make sure we had the science of Planetary Boundaries right. But why we feel this book has something that nobody else has done is that we have integrated the science of how the world is changing with how you change the world to make it better.

The scientists who produced the Planetary Boundary publications did a remarkable job. They had to bring so much together from so many varied scientific journals and make it into a sensible set of conclusions—very scary conclusions about the state of the planet. However, there has been a reasonable time that has passed since these publications and they were communicated very strongly in science media outlets, but it has not made much impression on the general public, businesses, or politicians. While some governments and businesses see the value in applying the Planetary Boundaries, this has taken considerable effort for each organization and the outcomes are typically incomplete and ad hoc. We think we know why and have written a book to enable us to see if our approach helps make it more possible to have a coherent approach about making our world better on all the Planetary Boundaries.

The reason we believe it has not been well understood beyond the first reaction of “this is terrible” is that the Planetary Boundaries are not in metrics that are comparable with human activity and decision-making. They are not even the same type of metrics; they are apples and oranges which cannot be compared. They also cannot be scaled into meaningful parameters where we can take responsibility at different levels. So, we have tried to fix this.

The reason we were able to see the issues and had an approach to fix it is because we have both worked with industry and with governments on policy-oriented environmental tools. These tools come from State of the Environment Reporting which

has been set up at all levels of government and industry, and we also have been closely involved in local community groups and local governments where people are trying to work out what environmental responsibility means for them.

So, we have brought a different perspective to the Planetary Boundaries that is based on a number of other areas of expertise in the social sciences and humanities.

The other motivation behind this book is that we are parents and even grandparents in my case. You cannot look into the eyes of your own progeny without worrying about whether we have some hope for their future. This book is aimed at providing that hope.

If you do not think we are serious, then you should know that in order to get the science of Planetary Boundaries right, and to see if the scientists who did this amazing compilation of science can agree with the approaches we have taken to reframe them, Kate had to go and meet them all, mostly in Europe. She packed up her husband and two young children, bought a van and drove around Europe for 8 months, presenting seminars and having in-depth discussions with the scientists. She even had the van towed away at night once, leaving her and her family stranded with nowhere to sleep! This is real commitment. Check out Kate's blog if you want to know more <https://airphd.wordpress.com/>.

We are keen therefore that you read this and see what you can do about the suggested solutions. We need lots of suggestions for what can be done with the new tools we have created. And we are happy to recognize you in any further publications we do on the subject. So write to us, we are not hard to find at Curtin University or the Planetary Accounting Network <https://www.planetaryaccounting.org/>.

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