

# ***21CC***

# ***PROJECT***

# ***COST OF PLANET***

***A PATH TO ONE \$-SUSTAINABILITY  
METRIC FOR THE PLANET***

***21CC - 21<sup>st</sup> CENTURY CAPITALISM***

*Roland Menke*

*Venture Capitalist and M&A-Advisor*

*Rotterdam, November 2010*

*E-mail: [mcf.rotterdam@planet.nl](mailto:mcf.rotterdam@planet.nl)*

## **CONTENTS OF THE COP-PROJECT PLAN**

<b>EXECUTIVE SUMMARY</b>	<b>3</b>
<b>1. THE NEED FOR ONE \$-SUSTAINABILITY METRIC</b>	<b>7</b>
1.1. <i>Sustainability@now does not work</i>	7
1.2. <i>Current Corporate Sustainability Reporting</i>	9
1.3. <i>The Need for One \$-Sustainability Metric</i>	10
<b>2. ONE \$-SUSTAINABILITY PLANET METRIC BASED ON COP</b>	<b>12</b>
2.1. <i>What is COP?</i>	12
2.2. <i>Why does COP work?</i>	14
<b>3. LIFE CYCLE ANALYSIS ('LCA') IS KEY TO COP</b>	<b>16</b>
<b>4. COP-PROJECTGROUP</b>	<b>17</b>
4.1. <i>Three Executive Groups &amp; One Steering Board</i>	17
4.2. <i>Schedule &amp; Staffing &amp; Sponsors</i>	19
4.2.1. <i>SCHEDULE</i>	19
4.2.2. <i>STAFFING</i>	19
4.2.3. <i>SPONSORS</i>	20
<b>SUPPLEMENT: VISION PAPER REAL SHAREHOLDER VALUE</b>	<b>21</b>

## **EXECUTIVE SUMMARY PROJECT COST OF PLANET ('COP')**

### ***Target COP : Saving Capitalism leads to a Tipping Point for Sustainability***

COP is a \$-Sustainability Metric that takes advantage of the sheer self-interest of capitalism. Recognition of COP as an investment criterion by institutional investors with appr. \$ 75.000 billion of assets worldwide solves one of the main problems of capitalism i.e. 'how can capitalism stop the destruction of Real Shareholder Value and of itself as a system?' COP mobilizes the worldwide power of capital for its own sake and this simultaneously creates the beneficiary spin offs for the Planet and ourselves.

### ***What is COP?***

COP prices the Planet. COP is a \$-Sustainability Metric that takes the limited productive capacity of the Planet of 13.4 billion hectares as a starting-point to calculate a corporate ecological footprint. Currently, the Planet is over utilized by a factor 1.5 and this is growing to more than 2.5 Planet by 2050 ([www.footprintnetwork.org](http://www.footprintnetwork.org)). Every (un)sustainable product in the end stems from a business activity, but the good news is that businesses have the financial resources, the innovative capability, the power and above all the interest to change their products' sustainable design. COP enters the heart of capitalism as follows:

#### **Corporate Annual Accounts**

	<i>Sales</i>		
-/-	<b><u>Operating costs</u></b>		
	<i>Operating Result</i>		
-/-	<b><u>Tax</u></b>		
	<b>Net Result</b>	→ <b>Traditional Annual Accounts</b>	→ <b>Profit</b>
-/-	<b><u>Cost of Planet</u></b>	→ <b>Corporate Ecological Footprint x \$ 4,500/ha/year</b>	→ <b>Planet</b>
	<b>Social Result</b>	→ <b>Social Annual Accounts</b>	→ <b>Profit &amp; Planet</b>

### ***Why would Institutional Investors recognize COP as an Investment Criterion?***

COP focuses primarily on institutional investors whose core business is to pay pensions after 23, 47 and even after 116 years from now. They will increasingly not be able to do so under a business as usual scenario. The consequence of utilizing more than 2.5 Planets by 2050 is a series of crises on the way related to food, fresh water, energy, climate, biodiversity, environment and raw materials. Institutional investors therefore have a major interest to adopt COP as an investment criterion in order to be able to meet their future obligations.

### ***Why does COP work?***

COP links ecology directly up to shareholder value, the key driver of capitalism, thus arriving at Real Shareholder Value. It's the institutional investors that drive shareholder value maximization that in turn is the main driving force behind our 24/7-world economy. With their \$ 75.000 billion of assets worldwide institutional investors can mobilize the necessary sustainability change by adopting COP as a relevant investment criterion in their own interest as analysed above. As we're lacking a world government, capital is the only worldwide power that can be mobilized, organized as it is in institutions such as UNPRI, CD Project, SIF a.o. The real power to be unleashed is with the institutional investors. A re-allocation of the worldwide invested capital of \$ 75.000 billion based on COP can make the difference.

COP furthermore takes well advantage of the strong and continuous peer group pressure between businesses for finance. Institutional investors trigger strong peer group pressure as businesses continuously strive to be an attractive investment proposition. No single business wants to be ranked somewhere at the bottom of the investment lists within its peer group. Being at the bottom of such lists is expensive and can even be threatening to businesses' existence. Never ending peer group pressure for the lowest COP triggers exactly the desired sustainability change in international production, distribution and purchasing chains.

COP lands on the existing infrastructure of worldwide operating financial sustainability analysts

COP makes the \$-materiality of our Planetary challenges transparent as all businesses are confronted with large COP's in their annual reports. The cash effects of COP because of the reallocation of capital, the subsequent changes in international production-, purchasing- and distribution chains as well as the consumer shift due to real product prices are very substantial.

Finally, COP is based on the clear needs as expressed by institutional investors, businesses and reporting institutes - as explained below - to have one worldwide \$-Sustainability Metric.

### ***Institutional Investors → Their Need for One \$-Sustainability Metric***

Financials models rule our world.

Research by Robbert Eccles and Michael Krzus (One Report, 2009) among institutional investors and their internal and external financial sustainability analysts reveals that they are dying to incorporate sustainability into their financial models. The institutional investors and their analysts are well aware of the fact that we're heading for more than 2.5 Planet in 2050. This development and its related crises will increasingly hamper the institutional investors to pay pensions after 23, 47 and 116 years from now. For this reason, sustainability is considered a crucial strategic and financial factor by investors and financial analysts. A recent study performed by UNPRI, UNEP FI and Trucost (Universal Ownership, October 2010) confirms this statement.

However, it is currently impossible to factor sustainability in financial models as a standard Sustainability Metric expressed in monetary terms is lacking. Current financial models and derived investment decisions are primarily based on shareholder value while simultaneously qualitative sustainability indicators are more and more being taken into account. Shareholder value and sustainability indicators however are apples and oranges as they miss a common denominator e.g. money.

Furthermore, the prevailing sustainability indicators contain a major flaw in that they're implicitly going from the assumption of unlimited world strategic assets. The world's strategic assets here being defined as the one Planet, the limited fresh water supply and the limited raw materials supplies such as crucial metals and phosphates.

COP is a direct answer to the expressed need by investors and financial analysts to have a Sustainability Metric that is expressed in monetary terms and that takes the limited world strategic assets as a starting-point. COP can be used within the prevailing financial models as it calculates Real Shareholder Value.

### ***Businesses → Their Need for One \$-Sustainability Metric***

Research executed by Accenture & UN Global Compact among 766 CEO's of mostly Fortune 500 companies (June 2010) reveals that CEO's acknowledge the fact that sustainability issues are strategic and crucial to the future of their businesses.

Although important and crucial to their business, CEO's encounter problems in the execution of their sustainability strategy in that sustainability is not factored in current valuation models by investors. 86% of these CEO's see "accurate valuation by investors of sustainability in long-term investments as important to reaching a tipping point in sustainability. Financial reforms that enable sustainability activity to be incorporated into valuations by Investors" is one of the top 5 conditions for a new era of sustainability, according to this research group.

Another direct expression and clear signal of the importance of sustainability to businesses is the impressive initiative by the Sustainability Consortium ([www.sustainabilityconsortium.com](http://www.sustainabilityconsortium.com)). The objective of the consortium is to develop standards for product environmental and social sustainability. This excellent initiative has been started by Wal-Mart and some 50 other mostly Fortune 500-companies, also out of short and long term self-interest.

### ***Reporting Institutes → Their Need for One \$-Sustainability Metric***

Although major steps have been made in corporate sustainability reporting by a.o. GRI in the last decade, it is still impossible to assess whether a business is operating in an (un)sustainable way and to what extent. Only relative assessments within businesses' peer groups or over time can be performed. A clear Sustainability Metric or benchmark is missing.

Current reporting and analysis structures implicitly go from the assumption of unlimited world strategic assets. Without a sustainability benchmark, analyses and comparisons are being made in a vacuum. This missing element is also mentioned in 'One Report' by Robbert Eccles and Michael Krzus.

COP addresses exactly this point by taking the limitations in the world strategic assets as a starting-point to develop a \$-Sustainability Metric.

### ***What's New?***

- COP takes advantage of the sheer self-interest of capitalism. In this respect COP is new as sustainability has up till now mostly been approached from either the Planets' ecological perspective (biodiversity loss, shrinking fresh water supplies, diminishing fertile topsoil, chemical pollution etc.) or from humankind's perspective (we are facing huge problems).
- COP directly appeals to the expressed needs by institutional investors, businesses and reporting institutes for a \$-Sustainability Metric.
- COP unleashes the power of \$ 75.000 billion invested capital i.e. capitalism to direct it in another, more sustainable way. As we're lacking a world government, capital is the only real worldwide power that can be mobilized.

- COP and thus sustainability enter the heart of capitalism by connecting ecology to the prevailing shareholder value paradigm.
- COP takes advantage of the strong peer group pressure between businesses. CEO's and CFO's put a major effort in being an attractive investment opportunity for institutional investors. Striving for the lowest COP becomes the new objective between peers.
- COP tackles the flaw in current corporate sustainability reporting i.e. the implicit assumption of unlimited world strategic assets. COP takes the limited world strategic assets as a starting-point and so it is an absolute benchmark for corporate sustainability.
- COP as a non-cash reporting item has tremendous cash effects as (un)sustainability gets a price. COP has quite dramatic consequences for businesses that are unsustainable by nature. The reallocation of invested capital based on COP leads to a major change in purchasing, production and distribution processes by businesses. Contrary to today, unsustainable products will become more expensive than sustainable products. This leads to a substantial consumer shift and also to the accelerated development of innovative sustainable technologies.
- COP creates a natural business level playing field. As capital flows all over the world, it permeates the farthest corners of society and thus sustainability does. COP is independent of governmental actions and so it avoids prisoners' dilemma's that governments have in implementing sustainability measures.
- COP as a quantitative sustainability indicator fits needless into the current worldwide infrastructure of institutional investors and their financial sustainability analysts, that are actually awaiting a \$-Sustainability Metric. Worldwide and real time on-line networks such as Reuters and Bloomberg facilitate the distribution of indicators such as COP.
- COP is linked up of the prevailing shareholder value paradigm, a concept that has an important advantage over the macro-economic GDP-concept. Shareholder value calculates the future back to now, while GDP doesn't take the future into account.
- COP makes all of us economic owners of our Planet as we're going to pay for it.
- COP is a tipping point for sustainability.

### **THE COP-PROJECT**

The COP-Project aims at bringing together all interested parties such as institutional investors, businesses, analysts, reporting institutes as well as specialists on the ecological footprint and LCA in order to set up a \$-Sustainability Metric. All these parties hold pieces of the puzzle that should lead to a \$-Sustainability Metric. Chapter 4 in the project plan hereinafter sets out how to arrive at COP.

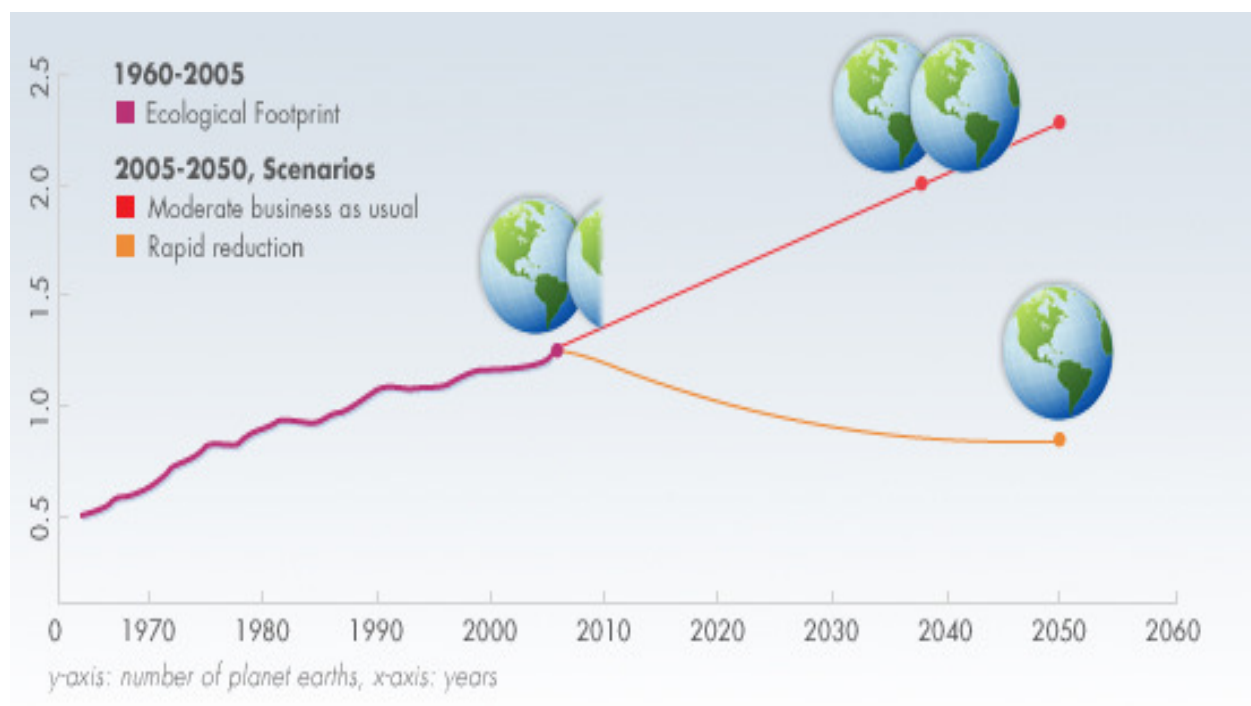
# A PATH TO ONE \$-SUSTAINABILITY METRIC FOR THE PLANET

## 1. THE NEED FOR ONE \$-SUSTAINABILITY METRIC

### 1.1. *Sustainability@now does not work*

Sustainability is not breaching the vested interests of Capitalism. This is best shown by the graph below, that is based on humankind's worldwide Ecological Footprint. The graph demonstrates that we're currently living in overshoot by using 1.5 planet ([www.footprintnetwork.org](http://www.footprintnetwork.org)).

Actually, there is no indication whatever that we're going back to using just one Planet or less. On the contrary, now the middle class in China and India is starting to adopt western consumption patterns (Asian Development Bank), expectations are that we will be using appr. 2.5 productive planets around 2050 under a **moderate** business as usual scenario.



NUMBER OF PLANETS USED

SOURCE: GLOBAL FOOTPRINTNETWORK

Despite all intentionally good sustainable efforts related to the Planet, the above graph shows we're apparently on the wrong track. Sustainability as being practised nowadays does not change the direction of the overshoot-graph above back to using one Planet or less. Two major causes lie at the bottom of this observation:

- 1) ***A clear Corporate Sustainability Metric or Standard that is directly derived from the limited world strategic assets does not exist.*** The origin of the current overshoot is entirely the direct or indirect result of business and the strongly related media activities. Every (un)sustainable product or service stems in the end from a business activity. The good news is that businesses have the financial resources, the innovative capability, the power and above all the interest to change their products' sustainable design. This is why the overshoot can be excellently influenced by businesses.

However, it is currently impossible to assess whether businesses are operating in a (un)sustainable way and to what extent, simply because a Sustainability Metric is lacking. Therefore, it is imperative to take the limitations in the world strategic assets such as the productive capacity of the Planet, the fresh water capacity and certain scarce metals as a starting-point to develop a Sustainability Metric.

- 2) ***Sustainability has not been translated into monetary terms.*** Whilst the world strategic assets such as fertile land, fresh water, fishing grounds, forests, good living environment, biodiversity, stable climate, crucial metals etc. are becoming increasingly scarce, the use of them still has no price in an economic sense (i.e. no 'Cost of Planet'). Until now our Planet has been available free of charge and has therefore been drained without limit.

This also explains why sustainability has not yet entered the heart of capitalism. The heart of capitalism here being defined as the prevailing paradigm of profit and shareholder value maximization. Money counts in this fully materialized world and with a Planet free of charge investors, businesses, governments and consumers cannot make sustainable decisions and choices, because (monetary) incentives to act accordingly are lacking.

Of course, there is an obvious incentive for businesses and consumers to e.g. save energy and thus reduce CO<sub>2</sub>-emissions. But these type of quick sustainable gains are by far not sufficient to reduce our current overshoot of 1.5 Planet.

For these reasons, it's necessary to first develop a Sustainability Metric that is based on the limited world strategic assets. The second step is to translate this Sustainability Metric into monetary terms.

Let us now for a moment analyze the sustainability reporting structures as they prevail these days. After that we will return to the advocated \$-Sustainability Metric.



## 1.2. Current Corporate Sustainability Reporting

In the last decade corporate sustainability reporting has undergone an impressive development. Sustainability reporting structures have been developed by GRI, A4S, Trucost, Carbon Disclosure Project, DVFA, EFFAS as well as ESG-analyses by Goldman Sachs, Thomson Reuters, Nasdaqomx, Bloomberg, Sustainable Value and the Dow Jones Sustainability Index. Various reporting organisations are currently joining forces to come to 'One Report' ([www.integratedreporting.org](http://www.integratedreporting.org)). One Report combines traditional financial reporting and sustainability reporting, that are up till now separate reports. This is all very encouraging.

Sustainability reporting structures such as the GRI Guidelines have also paved the way to design a \$-Sustainability Metric as a lot of ingredients for such a Metric are already being reported. Existing sustainability reporting structures have furthermore accomplished that businesses are more and more getting used to reporting their sustainable achievements.

Nevertheless, in paragraph 1.1. it is clearly shown that we're literally running out of Planet. Scarcity in the productive capacity of the Planet runs parallel to scarcity in other world strategic assets such as fresh water and raw materials (crucial metals and phosphates). Effectively, the scarcities in the world's strategic assets lead to the upcoming systemic crises related to food, environment, fresh water, energy, biodiversity, raw materials and climate. Although major improvements have been made in corporate sustainability reporting, the fact is that the KPI's used in the current reporting structures on a micro-business level do not reflect the aforementioned macro-ecologic developments in the limited world strategic assets.

Current sustainability reporting focus on analysing companies' *relative* sustainable performances i.e. over time and with their peers. For example: Being sector nr. 1 in the Dow Jones Sustainability Index (DJSI) only tells us that this particular business is operating in a less unsustainable way than its peers. However, we don't know how this business performs in terms of an *absolute* sustainability metric/benchmark/ standard that is based on the world's limited strategic assets, simply because such a metric does not exist. Current reporting structures thus operate in a vacuum. Even 'One Report' - once it is implemented on a large scale - will not give us a clue in this respect.

The prevailing sustainability reporting structures implicitly go from the assumption that we're still living in a world with unlimited resources. This implicit and incorrect assumption has far-reaching consequences as current sustainability reporting and analysis structures do not incite to change the direction of the overshoot trends.

This is exactly why we need an absolute \$-Sustainability Metric that takes the limitations in the world's strategic assets as a starting-point in order to price them and value them within the prevailing shareholder value paradigm. Analyzed against such a \$-Sustainability Metric, companies' sustainable performances can be screened in terms of their utilization of the world's strategic assets. Subsequently, comparisons can be made between businesses and their peers on the basis of this Metric and over time.

### **1.3. The Need for One \$-Sustainability Metric**

#### ***Institutional Investors: Their Need for One \$-Sustainability Metric***

Financials models rule our world.

Research by Robbert Eccles and Michael Krzus among institutional investors and their internal and external financial sustainability analysts laid down in 'One Report' reveals that analysts are dying to incorporate sustainability into their financial models. Investors and analysts nowadays really face problems analyzing companies' sustainable performances. "We do not make investment judgments based on environmental reports, as data provided by companies are not comparable and cannot be converted to financial figures", states an equity analyst at AllianceBernstein or "It is very hard to analyze information on sustainability that cannot be incorporated into our financial models. The lack of sustainability standards is a key constraint as well as the lack of time for doing analysis. The transaction costs of finding and figuring out how to use the information on sustainability are too high", notes a senior analyst of J.P. Morgan (quotes from 'One Report').

The institutional investors and their financial sustainability analysts are well aware of the fact that we're heading for more than 2.5 Planet in 2050. This development and its related crises will increasingly hamper the institutional investors to pay pensions after 23, 47 and 116 years from now. For this reason, sustainability is considered a crucial strategic and financial factor by investors and financial analysts. A recent study performed by UNPRI, UNEP FI and Trucost (Universal Ownership, October 2010) confirms this statement.

However, it is currently impossible to factor sustainability into financial models as a standard Sustainability Metric expressed in monetary terms is lacking. Current financial models and related investment decisions are primarily based on shareholder value while simultaneously qualitative sustainability indicators are more and more being taken into account. Shareholder value and sustainability indicators are apples and oranges as they miss a common denominator e.g. money.

One of the biggest barriers cited by the investment community to incorporating sustainability information into their fundamental analysis is the lack of standards. Major investors as well as financial analysts indicate that they expect that within 5 to 10 years from now some kind of Sustainability Metric will become operative (The Deal, April 2, 2010).

Furthermore, the prevailing sustainability indicators contain a major flaw in that they're implicitly going from the assumption of unlimited world strategic assets. The world's strategic assets here being defined as the one Planet, the limited fresh water supply and the limited raw materials supplies, especially crucial metals and phosphates.

COP is a direct answer to the expressed need by investors and financial analysts to have a Sustainability Metric that is expressed in monetary terms and that takes the limited world strategic assets as a starting-point. COP can be used within the prevailing financial models as it calculates Real Shareholder Value.

### ***Businesses: Their Need for One \$-Sustainability Metric***

Research executed by Accenture & UN Global Compact among 766 CEO's of mostly Fortune 500 companies (June 2010) reveals that CEO's acknowledge the fact that sustainability issues are strategic and crucial to the future of their businesses.

Although very important to their businesses, CEO's encounter problems in the execution of their sustainability strategy in that sustainability is not factored in current valuation models by investors. 86% of these CEO's see "accurate valuation by investors of sustainability in long-term investments as important to reaching a tipping point in sustainability". One of the top 5 conditions for a new era of sustainability mentioned by the Accenture / UNGC research team is: "Financial reforms that enable sustainability activity to be incorporated into valuations by Investors".

This outcome also points in the direction of a clear Sustainability Metric. Although these CEO's factor sustainability as a top strategic priority, they simultaneously feel the pressure of having to achieve the next quarter's results. Sustainability is not part of this financial pressure, according to these CEO's. CEO's have a major concern whether investor, purchasing, government and consumer decisions are really driven by sustainability.

Another direct expression and clear signal of the importance of sustainability to businesses is the impressive initiative by Sustainability Consortium ([www.sustainabilityconsortium.com](http://www.sustainabilityconsortium.com)). Objective of the consortium is to develop standards for product environmental and social sustainability. This excellent initiative has been started by Wal-Mart and some 50 other mostly Fortune 500 companies out of short and long term self-interest.

### ***Reporting Institutes: Their Need for One \$-Sustainability Metric***

Although major steps have been made in terms of corporate sustainability reporting by a.o. GRI in the last decade, it is still impossible to assess whether a business is operating in an (un)sustainable way and to what extent. Only relative assessments within businesses' peer groups or over time can be executed. A clear Sustainability Metric or benchmark is missing.

Current reporting and analysis structures all implicitly go from the starting-point of unlimited world strategic assets. Without a sustainability benchmark, analyses and comparisons are being made in a vacuum. This missing element is also highlighted in 'One Report' by Robbert Eccles and Michael Krzus.

COP addresses exactly this point by taking the limitations in the world strategic assets as a starting-point to develop a \$-Sustainability Metric.

### ***One \$-Sustainability Metric***

One Metric is a supplement to the current sustainability indicators, it is not a substitute as both measure different subjects. The reason why **One** generic \$-Sustainability Metric for the Planet is advocated is that it is important to work on the basis of one worldwide standard and framework for valuing and reporting (un)sustainability. One \$-Sustainability Metric enables investors and businesses to make fair comparisons and analyses on the same basis. One Metric broadens the current scope of shareholder value maximization and it generates one generic worldwide sustainability target for the Planet.

## 2. ONE \$-SUSTAINABILITY PLANET METRIC BASED ON COP

### 2.1. *What is COP?*

The approach as described in the attached Vision Paper 'Real Shareholder Value' could function as a basis to develop One Sustainability Metric for the Planet.

In this paper Cost of Planet ('COP') is introduced. COP is a sustainability metric that takes a scarce world strategic asset as a starting-point i.e. the limited productive capacity of the Planet of 13.4 billion hectares, currently being overutilized by a factor 1.5.

COP has been translated into monetary terms and thus permeates the heart of capitalism.

COP is based on the Corporate Ecological Footprint. The EU Commission qualifies the Ecological Footprint at this present time as the best measuring instrument of sustainability related to the Planet.

The Corporate Ecological Footprint in turn is based on Life Cycle Analyses ('LCA') of corporate products and services.

It is possible to enlarge the definition of COP beyond the productive Planet and include the Corporate Fresh Water Footprint as well as the Corporate Metal Footprint, both LCA-based, and any other scarce un(der)priced world strategic asset that might be deemed useful to include in COP.

COP is presented in the attached Vision Paper as a relevant investment criterion for institutional investors such as pension funds, insurance companies and banks out of sheer self-interest. Recognition of COP as an additional investment criterion solves one of the main problems of capitalism i.e. 'how can capitalism stop the destruction of Real Shareholder Value and of itself as a system?'

The COP-approach in a nutshell:

- COP effectively means an optimization of capitalism. Capitalism@now is solely focused on Profit. COP entails a two-dimensional accountability of businesses i.e. on Profit and Planet. This double accountability can be achieved by adding two lines to the current corporate annual accounts leading to a social profit or a social loss as follows:

#### Corporate Annual Accounts

	<i>Sales</i>		
-/-	<u>Operating costs</u>		
	<i>Operating Result</i>		
-/-	<u>Tax</u>		
	<i>Net Result</i>	→ <i>Traditional Annual Accounts</i>	→ <i>Profit</i>
-/-	<u>Cost of Planet</u>	→ <u>Corporate Ecological Footprint x \$ 4,500/ha/year</u>	→ <i>Planet</i>
	<i>Social Result</i>	→ <i>Social Annual Accounts</i>	→ <i>Profit &amp; Planet</i>

- COP is based on the Corporate Ecological Footprint. Thus macro-ecologic & macro-economic problems that arise as a consequence of the limited world strategic assets are brought down to micro-business level. Exactly this link is missing in the current reporting and analysis structures as described in chapter 1.
- COP is making perfectly clear to what extent businesses are using the Planet. Businesses will report a social loss or profit. Not surprisingly, the majority of businesses will see a social loss to a greater or lesser extent, which is linked to reality. After all, by using 1.5 Planet we find ourselves literally in a situation of social loss.
- COP enables institutional investors and analysts to evaluate corporate sustainable performance against this COP-benchmark, with their peers and over time. The effect of COP as an investment criterion is that businesses will feel pressure from investors to reduce COP in their international production, purchasing and distribution chains. The attraction and retention of equity and debt finance is a business' lifeline, which is exactly the reason why CEO's & CFO's spend approximately 30% of their time on investor and bank relations.
- Institutional investors put peer group pressure on businesses reducing their social losses. Social profits can only be achieved by a strong reduction of the Corporate Ecological Footprint. This is not easy and requires a completely different approach to current business operations. Reduction in the Corporate Ecological Footprint can for example be achieved by starting to think about business operations in a cradle to cradle way. This is exactly what we need to start changing the Planet's overshoot curve in the other direction in order to bring it back to 1 Planet.
- COP is pricing the world's strategic assets that are currently un(der)priced. This is about time as until now the Planet has been available free of charge and has therefore been depleted without limit. In a fully materialized world it's crucial to start pricing the most important strategic assets to capitalism.
- COP implies (un)sustainability gets a price. Prices of products and services will reflect their level of (un)sustainability. Contrary to today, unsustainable products will become more expensive than sustainable products. This will accelerate investments in innovative sustainable technologies.

## 2.2. *Why does COP work?*

There are 9 driving forces that make COP work:

### 1) ***COP TAKES ADVANTAGE OF THE SELF-INTEREST OF CAPITAL(ISM)***

COP is a \$-Sustainability Metric that takes advantage of the sheer self-interest of capitalism. Recognition of COP as an investment criterion by institutional investors with appr. \$ 75.000 billion of assets worldwide solves one of the main problems of capitalism i.e. 'how can capitalism institutional investors stop the destruction of Real Shareholder Value and of itself as a system?' COP mobilizes the worldwide power of capital for its own sake and this simultaneously creates the beneficiary spin offs for the Planet and ourselves. COP as a non-cash reporting item has tremendous cash effects as (un)sustainability gets a price.

### 2) ***COP IS AN ANSWER TO THE NEEDS OF INSTITUTIONAL INVESTORS, FINANCIAL ANALYSTS, BUSINESSES AND REPORTING INSTITUTES FOR ONE \$-SUSTAINABILITY METRIC***

Institutional investors and their financial analysts are dying to incorporate sustainability in their financial models. This is currently impossible as a \$-Sustainability Metric does not exist. See paragraph 1.3. above.

Research by Accenture / UN Global Compact among 766 CEO's of mostly Fortune-500 companies, reveals that 86% of these CEO's see "accurate valuation by investors of sustainability in long-term investments as important to reaching a tipping point in sustainability".

Currently, it is still impossible to assess whether a business is operating in an (un)sustainable way and to what extent. Only relative assessments within businesses' peer groups or over time can be executed. Current corporate sustainability reporting implicitly goes from the starting-point of unlimited world strategic assets. Without a clear Sustainability Metric or benchmark, analyses and comparisons are being made in a vacuum. This missing element is also highlighted in 'One Report' by Robbert Eccles and Michael Krzus.

COP addresses exactly this point by taking the limitations in the world strategic assets as a starting-point to develop a \$-Sustainability Metric.

### 3) ***COP UNLEASHES THE POWER OF INSTITUTIONAL INVESTORS RE-ALLOCATING € 75.000 BILLION OF ASSETS BASED ON COP***

The real power to be unleashed is with the institutional investors. A re-allocation of the worldwide invested capital of \$ 75.000 billion based on COP can make the difference. COP links ecology directly up to shareholder value, the key driver of capitalism, thus arriving at Real Shareholder Value. It's the institutional investors that drive shareholder value maximization that in turn is the main driving force behind our 24/7-world economy. With their \$ 75.000 billion of assets worldwide institutional investors can mobilize the necessary sustainability change by adopting COP as a relevant investment criterion in their own interest. As we're lacking a world government, capital is the only worldwide power that can be mobilized, organized as it is in institutions such as UNPRI, CD Project, SIF a.o.

#### **4) COP TAKES ADVANTAGE OF PEER GROUP PRESSURE**

Institutional investors trigger strong peer group pressure as businesses continuously strive to be an attractive investment proposition for investors. CEO's and CFO's spend appr. 30% of their time to banks and investors. No single business wants to be ranked somewhere at the bottom of the investment lists within its peer group. Being at the bottom of such lists is very expensive and can even be threatening to businesses' existence. The reallocation of invested capital based on the never ending peer group pressure for the lowest COP triggers exactly the desired sustainability change in international production, distribution and purchasing chains.

#### **5) COP ENTAILS REAL PRODUCT PRICES**

COP implies (un)sustainability gets a price. Contrary to today, unsustainable products will become more expensive than sustainable products. This leads to major consumer shift to the more sustainable products. Furthermore, now that the real energy prices can be calculated, it will become evident that sustainable solar and wind energy is cheaper than energy derived from fossil fuels. This means a breakthrough for accelerated investments in sustainable energy and other innovative sustainable technologies.

#### **6) COP USES THE EXISTING INFRASTRUCTURE FOR SUSTAINABILITY ANALYSIS**

Although sustainability indicators are up till now qualitative by nature, they are nevertheless distributed worldwide and real time on-line onto the desks of institutional investors and their financial sustainability analysts by the Bloomberg and Reuters screens. COP will also be distributed real time on-line onto the same desks. COP as a quantitative sustainability indicator furthermore fits needless into the current worldwide infrastructure of institutional investors and their financial sustainability analysts, that are actually awaiting a \$-Sustainability Metric.

#### **7) COP DOES NOT OFFER ESCAPES**

COP is too high to earn oneself out with high net business profits. COP furthermore does not have the flaws and disadvantages that go with e.g. carbon emission trading systems.

#### **8) COP AS A BASIS FOR BONUS**

Incentive systems for corporate board members increasingly include a bonus for achieving sustainable targets such as being in the Dow Jones Sustainability Index. COP will fall into this current practice. Achieving one's bonus is still possible but only through care for the Planet i.e. by reducing COP and the underlying Corporate Ecological Footprint.

#### **9) COP HAS A CORPORATE IMAGE & PR-EFFECT**

COP in terms of reporting is placed in the heart of capitalism i.e. the profit & loss account. This enables society to assess whether businesses are making a social loss or gain. This creates an image and PR-effect for businesses that they definitely want to manage.

### **3. LIFE CYCLE ANALYSIS ('LCA') IS KEY TO COP**

COP is based on the Corporate Ecological Footprint. To assess the Corporate Ecological Footprint in a proper way it's necessary to use Life Cycle Analysis ('LCA') for corporate products and services. LCA analyses all environmental impacts during a product's full life cycle: From sourcing, production and transportation to final consumption.

Various organisations worldwide are active in this specialized field of LCA such as Eco-Invent, RIVM, TNO, Pré Consultants a.o. These organisations are currently building up impressive databases with thousands of product LCA's.

An interesting development is that the Global Footprint Network as founding father of the Ecological Footprint is now focusing on using LCA as a basis to determine the Ecological Footprint of organisations.

Simultaneously, the aforementioned organisations work together in order to establish LCA-Standards. This cooperation is being hosted by the World Business Council and the EU.

Furthermore, there is an impressive initiative by a group of mostly Fortune-500 companies and scientists are working together under the name Sustainable Consortium to develop a standard to analyse products environmental & social impacts. The work of this consortium ([www.sustainableconsortium.com](http://www.sustainableconsortium.com)) is covering for a great deal the work that needs to be done by the Executive Group 2) under paragraph 4.1. hereinafter. This is the most important building block to COP.

LCA enables to assess a product's Ecological Footprint and subsequently the Corporate Ecological Footprint as far as the Planet is concerned. In a later stage LCA might also prove to be a strong tool to identify People aspects during a products' life cycle such as fair trade, child labour and other social aspects.



## **4. COP-PROJECT GROUP**

### ***4.1. Three Executive Groups & One Steering Board***

Worldwide there are a lot of organisations working on parts of the puzzle that should lead to One Sustainability Metric for the Planet. Therefore, it makes sense to bring all these organisations together in order to jointly define One Sustainability Metric/Standard.

The COP Project Group will consist of 3 executive groups related to 3 major subjects:

#### **1) THE PRICE COMPONENT OF COP**

**Target:** *Finding an answer to the question: “What is the value of the Planet from the perspective of Capitalism ? (i.e. not from humankind’s perspective)*

A preliminary list of potential participants to this executive group in random order:

Trucost	UNPRI	CD Project
SIF	EUROSIF	CERES
Goldman Sachs	TEEB	Fortune 500-companies
McKinsey	EFFAS	Bloomberg
Accenture	DVFA	Thomson Reuters
Sustainalitics	Sustainable Value	Nasdaqomx
Asset4	Various Professors specialized in (Eco-)Valuation	

#### **2) THE VOLUME COMPONENT OF COP**

**Target:** *Developing a worldwide standard for the Ecological Footprint on LCA-basis*

A preliminary list of potential participants to this executive group in random order:

Global Footprint Network	CD Project (Inst. Investors)
Best Foot Forward	GRI
The Sustainability Consortium	Fortune 500-companies
DVFA	EFFAS
Eco-Invent	TEEB
LCA-specialists	KPMG
Trucost	Asset4
UNPRI (Institutional Investors)	SIF & EUROSIF (Inst. Investors)
World Business Council	Deloitte
Thomson Reuters	PWC
Bloomberg	Nasdaqomx
Accounting for Sustainability	Integrated Reporting (IIRC)
Sustainalitics	Various Professors specialized in Ecology

### **3) REPORTING AND AUDITING REGARDING COP**

**Target:** *Fitting in COP within existing reporting and auditing structures or – if necessary - developing new structures*

A preliminary list of potential participants to this executive group in random order:

GRI	Trucost
DVFA	CD Project (Institutional Investors)
UNPRI (Institutional Investors)	SIF & EUROSIF (Institutional Investors)
Fortune 500-companies	AccountAbility
EFFAS	Asset4
KPMG	Accounting for Sustainability
PWC	Integrated Reporting (IIRC)
Ernst & Young	Deloitte
Various Professors specialized in Reporting	

The 3 executive groups report to a steering board (also a preliminary list):

#### ***THE STEERING BOARD***

UNPRI  
 UNEP FI  
 UN Global Compact  
 CERES  
 CD Project  
 SIF  
 EUROSIF  
 World Business Council  
 Planet1st  
 Board members of all participants to the 3 working groups

#### ***THE INITIATOR***

The initiator of the COP-Project, Roland Menke, has developed COP in a private capacity without any commercial objective. He is currently approaching above-mentioned organisations to participate in the COP-Project. Menke will act as advisor to the COP-Project Group(s) and he is furthermore happy to disseminate the concept. After having started the COP-Project he has planned to write a PhD-thesis about COP. See the attached Vision Paper for further details about the initiator.

## 4.2. Schedule & Staffing & Sponsors

### 4.2.1. SCHEDULE

#### Phase 1

- |  |          |
|--|----------|
| <p>➔ Defining the Scope of the COP-Project (All participants)</p> <ul style="list-style-type: none"> <li>- Definition of the Limited World Strategic Assets</li> <li>- Definition of all other relevant issues to be addressed</li> <li>- Refining the Work Programme</li> </ul> <p>etc.</p> | 3 months |
| <p>➔ Executive groups 1) and 2) start off</p>  | 9 months |
| <p>➔ Executive group 3) starts off once it has a clear idea of which way developments go, based on the work of executive groups 1 and 2</p>  | 9 months |

#### Phase 2

After the 3 executive groups have come to conclusions regarding each of their subjects, new executive groups will have to be formed on topics such as:

- Testing the outcomes of the executive groups in a corporate environment and an institutional environment (simulation)
- Analyzing macro-economic effects
- Addressing implementation issues such as
  - Software that needs to be developed
  - Changes in legislation related to annual accounts
  - Education
  - PR & Media engagement
 etc.

### 4.2.2. STAFFING

A project manager and 3 senior-assistants, 1 for each executive group, during 1.5 year will be necessary to run Phase 1 of the COP-Project .

### **4.2.3. SPONSORS**

Budget to finance the COP-Project has to be arranged among the above-mentioned participants, thereby aiming for a Main Sponsor and other Sponsors.

The Main Sponsor should ideally be a non commercial organisation that is closely linked to institutional investors as main interested parties. UNPRI, CD Project, UNEP FI, CERES, Trucost, SIF, EFFAS and EUROSIF would all be excellent (joint) hosts for the COP-Project.

Participants to the executive groups and the steering board will deliver their input by putting qualified personnel at the disposal of the executive groups. Several promises to participate in this way have already been made.

***The motto of the COP-Project Group should ideally be:***

***“Better be almost right than precisely wrong. The way we measure corporate performance today is precisely wrong.”***

## SUPPLEMENT

# 21CC

## **21<sup>st</sup> CENTURY CAPITALISM** ***The Change From Inside***

### ***Vision Paper: Real Shareholder Value***

*Sustainability is not breaching the vested interests of Capitalism. Meanwhile, Capitalism is destroying itself. This paper explores a synthesis between both problems and interests by a 'Paradigm Shift' from inside Capitalism*

***Roland Menke***

## ***Real Shareholder value***

### ***The Free Planet problem of Capitalism***

From the start of the credit crunch there has been a call for a new form of sustainable capitalism. Governments have taken steps to direct and assume the general responsibility for the revolution toward a more sustainable world, however, the results of Kyoto and Copenhagen are clear. It is evident from recent research that climate and energy agreements between governments and the industrial sector do not work. Within the context of the intended sustainability measures, the industrial sector is demanding governments to ensure an international competitive 'level playing field'.

Businesses, pension funds and other institutional investors have a significant self-interest in playing a prominent role in the sustainability revolution. The sombre future scenarios for life on our Planet put forward by renowned institutions such as the IEA, World Bank, MIT, IPCC, WNF etc. have significant consequences for the shareholder value of businesses. By discounting future business cash flows, shareholder value effectively calculates the future back to now. However, the discounted cash flows do not include the effects of business activities on the Planet leading to the aforementioned sombre future scenarios. Whilst the Planet's resources such as fertile land, fresh water, fishing grounds, good living environment, biodiversity, stable climate etc. are becoming increasingly scarce, the use of them still has no price in an economic sense ('Cost of Planet'). Until now our Planet has been available free of charge and has therefore been drained without limit.

Due to the increasing scarcity of resources, this assumption of a free Planet is no longer tenable and is even unethical towards ourselves as humans, because it is a threat to our very existence. From a business perspective it is therefore unwise to ignore this Cost of Planet. The impact of the Cost of Planet on shareholder value should be a serious boardroom issue for businesses, pension funds and other institutional investors; maximisation of shareholder value is, after all, the main driving force behind the current Anglo-Saxon capitalist system.

### ***The Huge Power of Capitalism***

Maximisation of shareholder value links seamlessly to the oldest and most dominant part of our brains, the hypothalamus; a combination of neurological and behavioural research shows that this is where the strongest human impulses reside, including status orientation, the lust for power and greed. A manager in a business who is good at maximising shareholder value is awarded a higher position (which appeals to status and power) and a higher salary (which appeals to greed). Capitalism is thus being driven by 1 billion of the strongest human impulses in the 1<sup>st</sup> world, while appr. 5,5 billion people worldwide would like to jump on the bandwagon, with the Chinese and Indian population up front. This explains the intrinsic power and success of capitalism, which is considered to be the best system ever. Her power is also her weakness. Capitalism is self-destructive because of the unchanging and unrestrained character of our strongest human impulses.

### ***The Weakness of Sustainability***

Sustainability primarily lacks such a similar universal driving force and therefore it does not breach the vested interests of capitalism. The Cost of Planet make the Real Shareholder Value visible and this links sustainability up to the power of capitalism.

### ***Capitalism is destroying itself***

What is the relationship between Cost of Planet and shareholder value? Our Planet is 'the super machine' which forms the basis for all life and human activity. Yet it is precisely this super machine which is being swiftly eroded, due to the fact that we currently use 1.5 times more of the Planet than it produces on a yearly basis. This is the so called overshoot factor (Living Planet November 2009). Deforestation, desertification, chemical pollution of water and air, erosion of the fertile topsoil, decreasing fresh water supplies, decreasing supplies of rare metals and declining biodiversity are the consequences. Whilst the productive part of our Planet is declining increasingly faster, the world population will increase from 6.5 billion to 9.2 billion in 2050 with a higher average consumption level than today. Our strongest human impulses are unrestrained and the media continuously appeal to them on the basis of status anxiety (de Botton) and the theory of relative incomes (Layard). As a consequence we have ended up with an increasing number of people in an endless consumption spiral. A food, water, energy, raw material, biodiversity, climate and environmental crisis will be the consequences (The World Bank). Mankind is quite literally eating into its greatest and most fundamental capital: The Planet.



1. ***Our strongest human impulses are universal***
2. ***The Greek philosopher Plato even then stated that humankind was obsessed by (shiny) images of reality, thus losing clear sight of reality***

Mankind eating into its fundamental capital also has serious consequences for businesses. After all, without a habitable planet there will be no People, not to mention Profit. Increasing inhabitability as a consequence of the aforementioned demographic developments is going to increasingly inhibit business activities. People generally and in their roles as employer, employee, consumer and investor will be forced to spend more time on survival, first of all in the 3<sup>rd</sup> world and later globally. Food, energy and water shortages as well as environmental, political and climate catastrophes all reduce employability, productivity and also the availability of operating staff. The diminishing availability of staff, but also water, energy, rare metals and raw materials and increasing environmental pollution threaten business continuity.

These developments relating to raw materials, energy, food, water, biodiversity, environment and climate and their effect upon staff not only damage the production process but also consumers' disposable incomes, so that businesses are also going to experience increasing problems with their sales. In addition the costs which arise from climate change (€ 10,500 billion - IEA) and other crises will have to be borne.

The IEA recently established that, despite all of the political intentions, a de facto "unchanged policy" still exists. The continuous upward trend in the world's overshoot factor is a clear and simple signal in this respect and it is in line with the estimates that we need more than 2,5 productive planets by 2050 to support ourselves ([www.footprintnetwork.org](http://www.footprintnetwork.org)). Although intolerable, this is the result of the aforementioned infinite consumption spiral. Profitability and thus shareholder value and capital available for investment will fall during the course of these developments. This is precisely where the interests of businesses, pension funds and other institutional investors lie in playing a prominent role in the realisation of a sustainable world and paying attention to the Cost of Planet. The Cost of Planet and its effects on shareholder value are inescapable. Indeed, more than that, the effect on shareholder value is here already, it has just not yet been made visible.

### ***Synthesis between the interests of Capitalism and Sustainability***

Institutional investors adopting the Cost of Planet as a relevant investment criterion within shareholder value thinking solves the problem of capitalism i.e. 'how can capitalism stop the destruction of Real Shareholder Value and of itself as a system?' Simultaneously Cost of Planet solves the problem of sustainability i.e. 'how can sustainability develop a power as huge as capitalism, so that it finally breaches the vested interests?' It's interesting to see that the fiction of the free Planet is at the heart of both problems and that this fiction can be abandoned through the Cost of Planet.



### ***Determination of the Cost of Planet***

How are the Cost of Planet to be determined? They consist of a volume and a price component. The scientifically based measuring system of the Ecological Footprint has existed since 1996 (Rees & Wackernagel). The Footprint measures the quantity of productive land and ocean which is necessary to produce the natural resources for our consumption and infrastructure, together with the space which is required to absorb CO<sub>2</sub> emissions and waste. The space and energy usage, expressed as the number of hectares used annually, can be calculated for every product, service, individual, business, organisation or country. This is the Footprint ([www.footprintnetwork.org](http://www.footprintnetwork.org)). The EU Commission qualifies the Ecological Footprint at this present time as the best measuring instrument of sustainability related to the Planet.

The Footprint is a good management tool with a view to the crises referred to earlier. This is because the Footprint reflects the effects on food production (productive hectares), on climate and energy (the CO<sub>2</sub>-Footprint comprises appr. 40-50% of the Ecological Footprint), on the difference in welfare between the 1<sup>st</sup> and 3<sup>rd</sup> worlds (Footprint scale per country), on biodiversity, on water usage (Water Footprint) and on the environment (productive hectares required for the absorption of waste).

In addition to this, the Footprint is an outstanding global means of communication for sustainability related to Planet due to its simplicity and uniformity. Everyone, from businesses and pension funds to consumers, NGO's and governmental authorities can work with the Footprint and speak the same language. Businesses have all the information required to determine their own Footprint at their disposal within their systems. In the UK, the Footprint is already stated on product packaging.

What is lacking is the price per hectare per year, which triggers the question: 'What is the value of our Planet?' The value of the Planet is ultimately indeterminate as this value is infinitely great, varied, immaterial and immeasurable. Capitalism on the other hand, precisely due to its restricted scope, does offer guides for value determination. And since capitalism determines a large part of human activity, value determination from this perspective seems is relevant.

From the capitalist perspective, the Planet is 'merely' a production resource. It is the underlying super machine, with its 13.4 billion productive hectares (Living Planet Report 2008), which puts us in the position to generate annual Gross World Product which in 2009 amounted to appr. \$ 60,000 billion (World Bank). This is the current 'assumed perpetual earning capacity' of the Planet and therefore also the 'value at risk', which will be lost if the productive hectares on our Planet are reduced to 0 in the extreme case. Given the unpredictability and the irreversibility of changes to complex eco-systems in conjunction with the irreplaceability of our Planet and its resources we can allow no calculation of probability in respect of the consequences of our current actions. A worst case approach is wise here, if only to clarify the seriousness of the situation.

The utilization costs of the Planet from this strictly capitalist perspective therefore amount to \$ 4,500 per ha/year i.e. the Cost of Planet. This is an immediately usable simplification of the results of the valuation model which is currently the subject of doctoral research.

The increasing overburdening of the Planet's limited productive capacity is a fact and this raises the question not so much if but when the Cost of Planet will be recognized as an additional investment criterion within shareholder value thinking.

### ***Reporting the Cost of Planet***

How can we make the Cost of Planet definitive and visible? This can take place relatively simply by adding two lines to current corporate annual accounts as follows:

#### **Corporate Annual Accounts**

	<i>Sales</i>		
-/-	<b><u>Operating costs</u></b>		
	<i>Operating Result</i>		
-/-	<b><u>Tax</u></b>		
	<i>Net Result</i>	→ <i>Traditional Annual Accounts</i>	→ <i>Profit</i>
-/-	<b><u>Cost of Planet</u></b>	→ <i>Corporate Ecological Footprint x \$ 4,500/ha/year</i>	→ <i>Planet</i>
	<i>Social Result</i>	→ <i>Social Annual Accounts</i>	→ <i>Profit &amp; Planet</i>

### ***The Change from Inside through Real Shareholder Value***

The insight of no longer considering the Planet to be free is a real breakthrough. The result is that the abstract and intangible concept of sustainability is valued in monetary terms as far as the Planet is concerned. In this way, sustainable business performance can be measured and managed in a uniform manner, as a result of which real-time and mutual comparisons between businesses become possible. The Cost of Planet entail a change to the hard core of capitalism: Business performance is now measured in terms of Profit and Planet and this implies that we are no longer steering the complex 21<sup>st</sup> century with a profit-formula from the Middle Ages.

Existing socially responsible business reports based on GRI-guidelines and social annual reports must remain intact, since these contain numerous relevant qualitative indicators, both related to 'Planet' and 'People'. The Cost of Planet approach adds a new, money based dimension to existing socially responsible reporting.

The Cost of Planet are a relevant investment criterion because of the aforementioned capitalistic self-interest and thus they are an integral part of shareholder value thinking. Reporting on the Cost of Planet in corporate annual accounts means that the Real Shareholder Value suddenly becomes transparent. This has a major impact on the allocation of the tens of thousands of €//\$-billions in pension fund and institutional investments, precisely due to their focus on long-term shareholder value.

With this re-allocation of invested capital, pension funds and institutional investors exercise pressure on the business sector, as a result of which sustainability and a reduction in the Cost of Planet become a top business priority; the attraction and retention of equity finance is a business' lifeline, which is exactly the reason why CEO's & CFO's spend approximately 30% of their time on investor relations.

The Cost of Planet are, by the way, sufficiently high to prevent businesses from arriving at social profits through high net profits. Social profit can only be achieved by a strong reduction in the Footprint. The majority of businesses will see a social loss to a greater or lesser extent, which is linked to reality. After all, we find ourselves literally in a situation of 'social loss'. By using 1.5 Planet our current Real Gross World Product amounts to a perpetuity level of -/- \$ 30.000 billion if we include the Cost of Planet. Again, the reasoning is strictly from the perspective and self-interest of capitalism, not from humankind's perspective.

Now that we can make visible what businesses actually earn from a social point of view, a PR and image effect will also come about in addition to Real Shareholder Value thinking. We saw what happened previously with Shell Brent Spar, Nike child labour and PGGM arms trade, but what does this mean for the image of a business which makes € 200 million financial net profit, but simultaneously shows a social loss of -/- € 1 billion?

### ***Products get their true prices***

On the one hand businesses will have to drive down their Footprint and thus their Cost of Planet in their international production and purchasing chains. On the other hand they will have to charge their remaining Cost of Planet in their range of products and services. In this way products are sold for their true price. Now that the true energy prices can be calculated, it will become evident that sustainable solar and wind energy is cheaper than energy derived from fossil fuels. This means a breakthrough in accelerated investments in sustainable energy and other innovative sustainable technologies.

### ***Bonus and Greed only realizable through Care for the Planet***

Social profit is becoming the new status symbol. A bonus for high social profits is still possible, but only achievable through care for the Planet i.e. by reduction of the Cost of Planet. As mentioned before, greed cannot be changed as it resides in the oldest part of our brains. However, by broadening the focus of managers from pure Profit to Planet & Profit, the direction of greed is shifted.

Greed does not bring us happiness either. Studies (Veenhoven et al.) show that individual happiness in the 1<sup>st</sup> world is declining. This contrast is explained by status anxiety and the theory of relative incomes. These phenomena mean that we no longer simply want to own more in an absolute sense, but that we ideally wish to own more than the next person: The neighbour, the colleague and our social peers. This leads to an endless rat race with decreasing happiness. Now the true product prices reveal the Cost of Planet, our individual obsession with growth and materialism also shifts. This could therefore also benefit the individual happiness of citizens; beyond the empty pursuit of consumption.

### ***Interested parties: Institutional Investors and Businesses***

The influence of businesses on a sustainable revolution is very high. The origin of the global Footprint is entirely the direct or indirect result of business activities and can therefore be excellently influenced by them. In addition, businesses have the financial resources available, the innovative capability and the power to create a sustainable world. Robert Reich, Noreena Hertz, David Korten et al. have demonstrated convincingly that the global commercial sector wields the real power and not governments or consumers.

The power to be unleashed rests with the institutional investors. With their focus on long term shareholder value they have a strong incentive to recognize the very substantial risk related to the fiction of the free Planet and to base their investment choices on Real Shareholder Value. This investment approach by pension funds and other institutional investors gives the commercial sector the definitive stimulus to drive their business on the basis of Real Shareholder Value creation.

### ***21<sup>st</sup> Century Capitalism***

The Cost of Planet may only seem to be an innocuous reporting item. However, as an investment criterion it has an enormous cash effect due to the reallocation of capital invested by institutional investors to businesses with a relatively low Cost of Planet. The reallocation of invested capital subsequently leads to a drastic (cash) change in purchasing, designing, production, distribution and sales processes by businesses. A third cash effect arises from true product pricing. This stimulates consumers to choose the cheaper, sustainable products over the more expensive unsustainable products. Institutional investors' fund reallocation is business Achilles' heel and this will jointly with consumers' price sensitivity accelerate the necessary sustainability change.

The abundance of cheap money is at the basis of both the credit crisis and our current level of unsustainability i.e. our yearly consumption of 1.5 Planet. Our overleveraged world economy not only creates bubbles from time to time, but it also directly finances our unsustainable lifestyle.

Cost of Planet effectively is a rent paid for using the Planet. It turns all world citizens into economic owners of their own Planet. In this way undesired speculation possibilities are avoided as well as unwanted market effects such as those related to the prevailing carbon emission trading systems.

Through the Cost of Planet as an additional investment criterion used by institutional investors, sustainability permeates the heart and the capillaries of capitalism and latches onto its power. As invested capital flows all over the world, Cost of Planet automatically creates the level playing field as requested by the industrial sector. Governments will feel a strong tailwind from institutional investors and subsequently from businesses in the intended revolution towards a sustainable society.

In essence, Cost of Planet introduces a sustainable form of capitalism, in which self-interest and social interest converge.

### **About the author**

*Roland J.I. Menke has been working for 23 years in the field of Corporate Finance & Business Development.*

*After getting his university degree in business economics and his post graduate degree as registered financial controller he started as a banker with NIBC in The Hague. Subsequently, he worked for 9 years as financial director for the multinational Royal Nedlloyd. With his substantial experience in international turnaround and M&A-processes within Nedlloyd, he started his own business in 1997 Menke Corporate Finance & Venture Capital. Furthermore, he has been the financial & strategic advisor for more than 15 years to his family business, a successful medium-sized construction company.*

*Besides almost 25 years of focus on the 'P' for Profit, he has been driven for some 10 years by the notion of sustainability. This is reflected a.o. in this paper, which is based on his current doctoral research. He has developed COP in a private capacity without any commercial objective. At present he spends quite some in creating support for the advocated Change from Inside.*

*Roland is married to Marian, who works as a surgeon - specialized in oncology - in the ErasmusMC Clinic in Rotterdam. They have 3 children.*