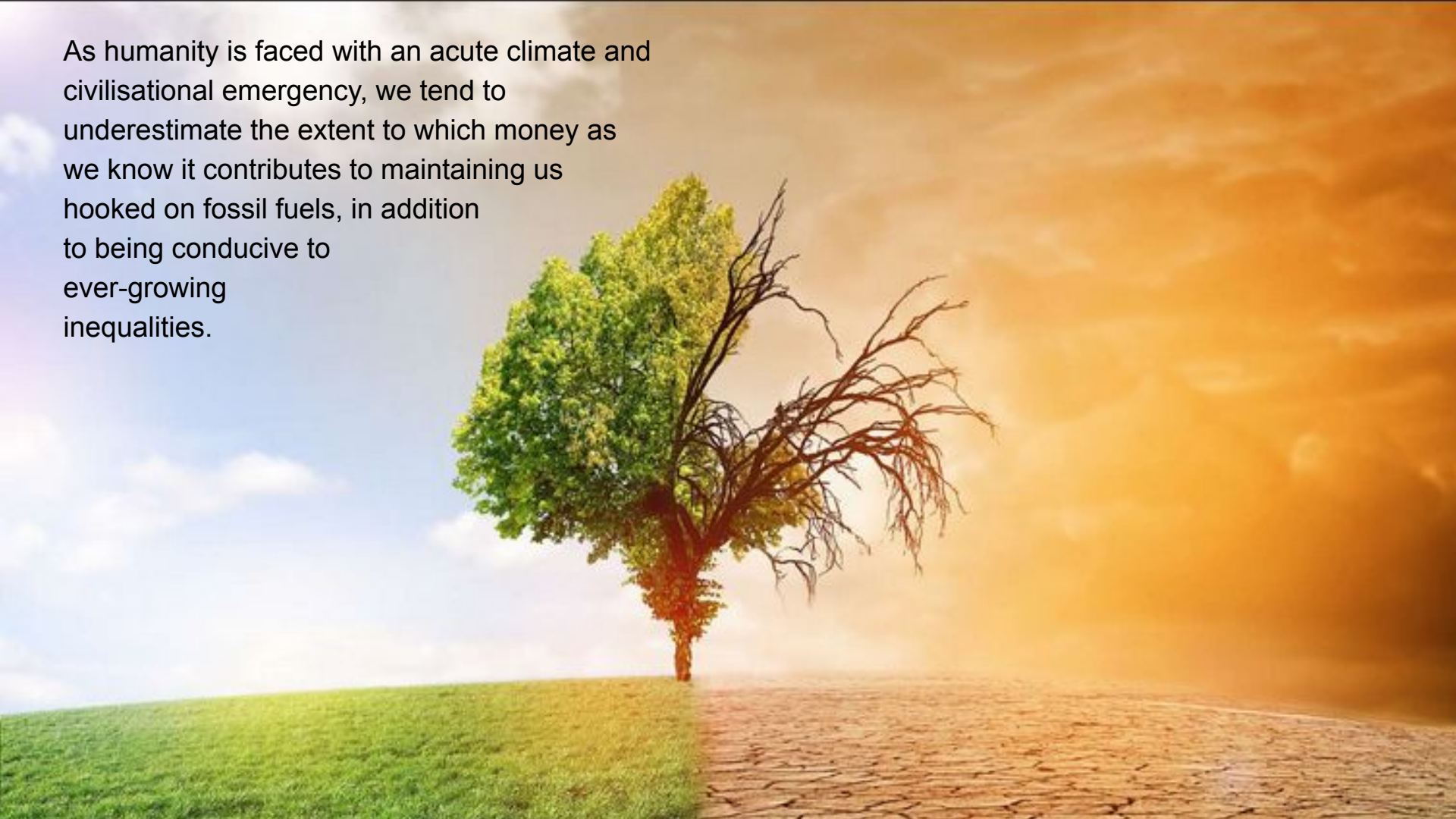
As humanity is faced with an acute climate and civilisational emergency, we tend to underestimate the extent to which money as we know it contributes to maintaining us hooked on fossil fuels, in addition to being conducive to ever-growing inequalities.



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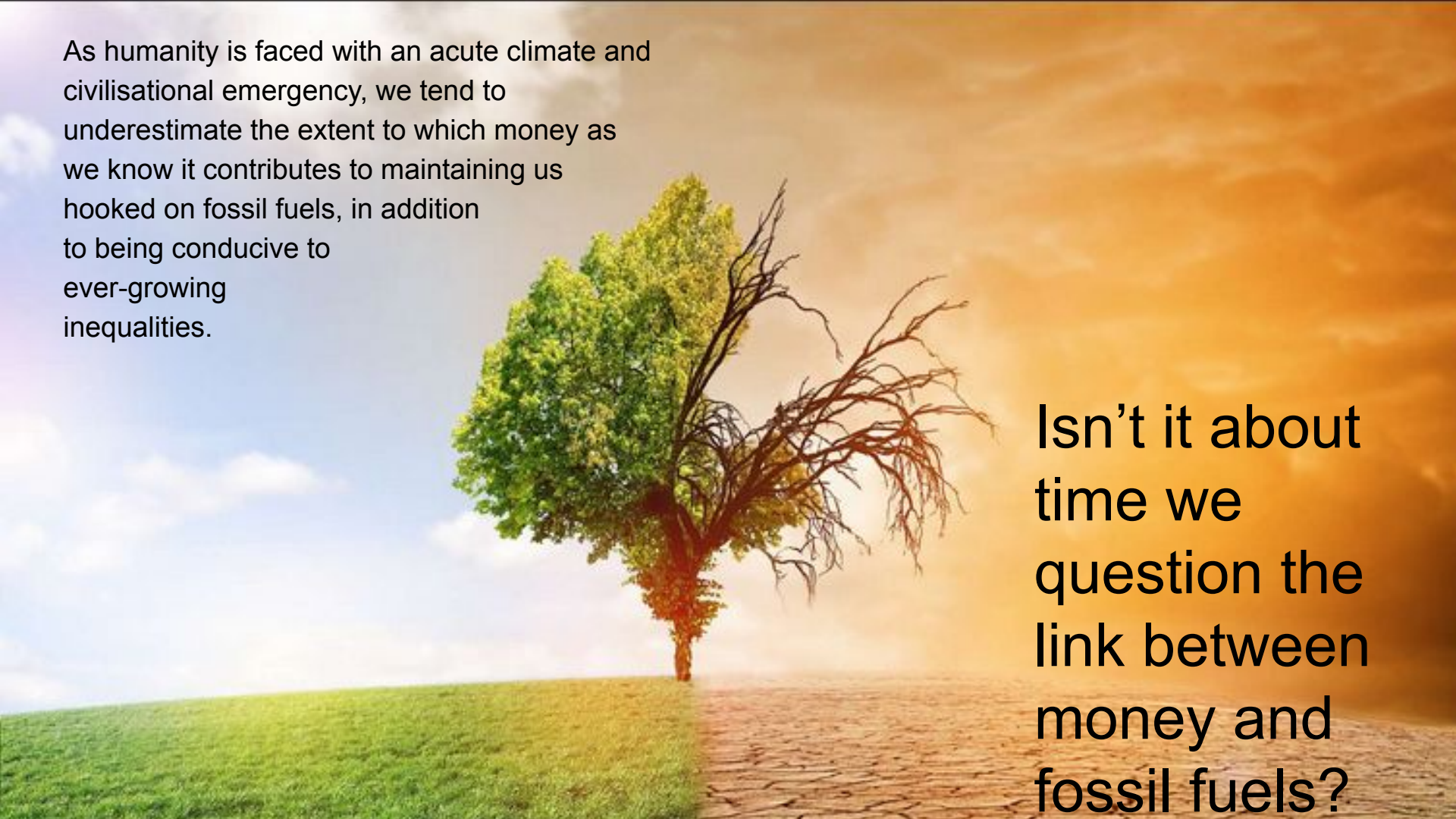


Isn’t it about time we question the link between money and fossil fuels?

How relevant are our usual monetary and economic measurement tools to the climate discussion?

In 2006, the Stern Report on the cost of climate inaction stated that “if we don’t act, the overall costs and risks of climate change will be equivalent to losing at least 5% of global GDP each year, now and forever.”

When devising climate mitigation and adaptation policies, we commonly assume that it makes sense to calculate their costs and benefits in dollars, euros or percentages of GDP.

Let us take a moment to get to the bottom of why this might be a mistake.

#1 Money is a human construct, not a given

Question: will dollars and euros necessarily be around 10 or 20 years from now?

Let us remember that conventional money

- was created by humans in the course of history
- is strongly dependent on a series of underlying assumptions (reliable representation and measure of value creation, safe store of value, universal recognition...)
- is prone to confidence crises (e.g. bank run) when any of these assumptions is called into question. What happens if euros can't buy me drinkable water or safe food? What if my wallet is full, but the air is unbreathable?
- is highly dependent on centralised infrastructure, i.e. insufficiently ruggedised against the kind of crises likely to erupt when climate breakdown hits

Answer: not necessarily

Sustainable dividend growth

Dividend vs. Brent

€/share

Clear visibility on
2019-25 strong cash flow growth
+1 B$ per year at 60 $/b

Increasing dividend

Board Guidance:

dividend growth of 5 - 6 % per yea

Immediate effect

#2 Money reflects an outdated view of value creation

Conventional money is supposed to reflect value created by humans. Any activity leading to an accrual measured in monetary terms is categorised as a profit-making activity and deemed socially acceptable provided the activity was realised within the boundaries of the law.

Given the pervasiveness of fossil fuels in virtually every segment of the economy, this means that transactions denominated in conventional money are almost systematically triggering additional emissions.

Growth-oriented economies measure their performance in monetary terms, thus stimulate the burning of fossil fuels. This often occurs even, perversely, when those activities are designed as decarbonisation efforts.

We commonly ascribe the notion of “value creation” to transactions which result in a profit measured in monetary terms. More often than not, however, from the perspective of a heating planet and a faltering biosphere, such transactions ought better be described as contributing to value destruction.

#3 Pricing ignores carbon intensity

Prices for products or services do not reflect their carbon content: we live in a world of wide-ranging “carbon opaqueness”.

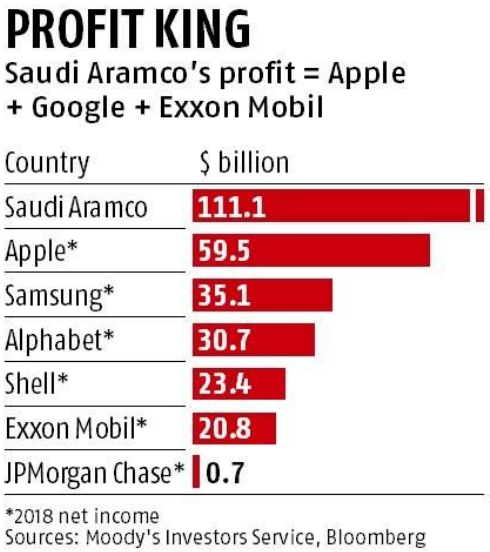
Carbon-unaware pricing reflects our economic system’s carbon blindness at large, but it is nevertheless highly efficient on its own to influence our behaviour (How many decisions do we take each day which are mainly based on pricing?)

#4 misleading pricing mechanisms obstruct mitigation

Ultimately, this lack of information about carbon content in prices is a feature, not a bug: it makes it much easier, and even natural, to ignore a product's or service's carbon footprint, and thus to perpetuate our carbon-drenched status quo.

This is also true for goods containing rare earths, manufactured using child labour, originating from conflict zones, having caused local pollution etc. However, fossil fuels are among the most difficult components to track because of their ubiquity in energy production and logistics, both in upstream and downstream supply chains.

#5 fossil fuels are historically associated with the highest returns on investment



Fossil fuels are the money makers par excellence. Although this era seems to be coming to an end, investments in oil, gas and coal have long been among those offering the highest returns (ROIs).

As the resistance encountered by the divestment movement over the past year has shown, this perception remains prevalent not just in banks and funds, but also in institutions such as cities and universities.

#6 Money isn’t neutral

As it is the only belief universally shared by humanity today, we tend to either forget or ignore the value-destroying dimensions of conventional money. To cope with climate challenge, our ability to question this common belief is crucial.

In other words: despite money's proverbial lack of it, there is a distinct smell of Brent emanating from our bills

A tough one

To summarise, money as we know it is ubiquitous, core and carbon-gendered

- **money is everywhere**: it has evolved to become mankind's sole universally shared belief and growingly permeates every aspect of our lives

- **money is core**: it lies at the heart of an economic system rooted in the extraction of resources ("extractivism") which
  - exacerbates inequalities and
  - keeps us addicted to the very family of products we urgently need to wean us off of

- **money is anything but neutral:** it is instrumental in hiding our products' and services' carbon content

⇨ **However, and very unfortunately, we hardly call it into question**

Bitcoin: from crypto-utopia to speculation

One attempt to breach the universal dominance of conventional money has gained worldwide attention: the bitcoin, a crypto-currency designed to be as resilient as the Internet itself and able to withstand any attempts at censorship or control, was launched in response to the 2008-2009 financial crisis.

Initially embraced by techno-libertarians and utopists, the bitcoin has also attracted speculators and shady actors. Despite efforts to increase its throughput, It has failed to date to become an alternative means of payment. While its mining mechanism is critical to ensure its resilience, this same mechanism is also causing most of its unacceptably high carbon footprint.

Focus on transformational, alternative DLT projects

In the crypto-universe, let us rather focus on the initiatives that try to unleash the digital ledger technology’s potential to disrupt the status quo and trigger societal transformation in fields such as tracking of climate action pledges or carbon content, product traceability, environmental compliance, decarbonisation...

Make monetary disobedience a part of civil and climate disobedience

Given its role in perpetuating the fossil status quo, the active questioning of conventional money and experimentation with alternative monetary forms must become part of civil and climate disobedience movements, lest they fail to break a critical element of the stranglehold which prevents us from addressing the issues at hand.

survcoin

The survcoin is an alternative coin dedicated to the reduction of our carbon footprint. It is a blockchain-based, dedicated currency which is being launched in Luxembourg as a pilot project, aiming to bring to the fore the paralysing function of conventional money by reward individuals and organisations for their carbon-reducing initiatives.

By incorporating the value created when reducing the carbon content of a product or service, the survcoin (for "survival coin") is meant to be used alongside conventional money to stimulate decarbonisation at large. It is also the perfect climate-action oriented complement for universal base income (UBI).

Mission statement: redefine value creation

By placing a lever at the heart of our money-centric culture, the survcoin project aims to contribute to decarbonisation by

- showing what is effectively creating value today

- stimulating behavioral changes towards carbon neutrality

Concept: reward rather than constrain

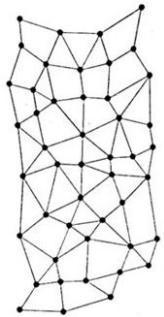
Building on the distributed ledger technology (blockchain, smart contracts, oracles...), the survcoin draws on our emulative spirit and our responsiveness to monetary stimuli to accelerate climate action.

How it works

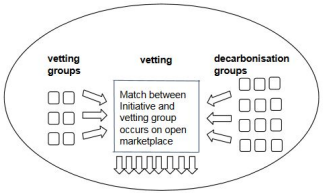
- On the basis of a reliable quantification of the decarbonisation merit of partnering initiatives, citizens and organisations earn survcoins when they reduce their footprint and get to spend them on climate-friendly products and services

- Baseline: avoided GHG emissions / 1 SVC = 140 g (non-emitted) CO_2

Infrastructure & vetting



- Blockchain protocol design
  - ensures minimal energy footprint of operations (sidechain/proof of authority); drive towards decentralisation of operations
  - Survcoin-denominated decarbonisation actions/transactions are handled by smart contracts
  - Survcoins are emitted exclusively as a reward for proven decarbonisation (no ICO, no sale)



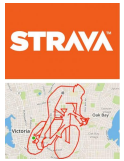
Against a fee, vetting groups verify materiality of decarbonisation and calculate survcoin emission ratios for each vetted project

- A network of recognised experts (“vetters”) assesses the footprint reduction merit of survcoin-rewarded initiatives. This network eventually evolves into a distributed “vetting market” governed by a set of publicly available guidelines geared for self-accelerating transformation towards carbon neutrality

Pilot project

Climate Action Blockchain a.s.b.l., created in Luxembourg in 2017, has obtained funding from Œuvre Grande-Duchesse Charlotte to deploy the survcoin concept as a pilot project in Luxembourg.

Examples of survcoin-denominated incentives:



- Mobility
  - carpooling apps such as Copilote or BlablaCar
  - Bike-sharing, bike-renting services, biking apps

- Electricity use: reward utility customers with survcoins when they
  - reduce their consumption
  - displace it to renewable energy-rich periods of the day

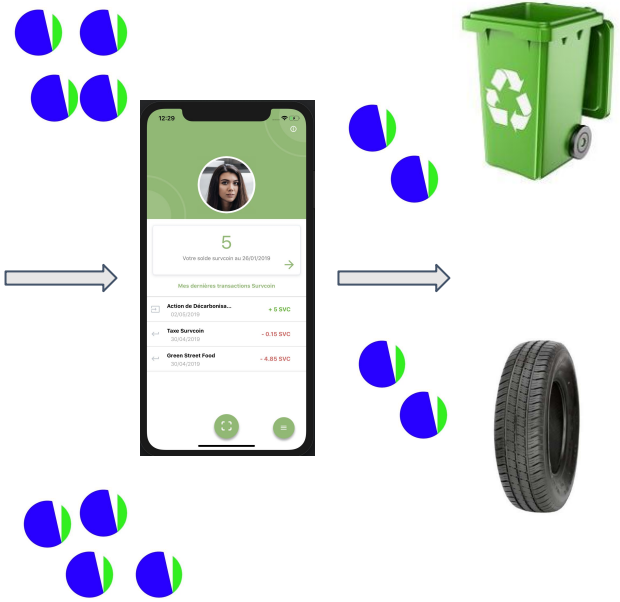
Initial loop to be launched in the coming months

Vël'OK users in the 8 participating communes will be able to earn survcoins when they use the shared bikes, obtaining 1 survcoin per km.

Users may also earn survcoins as a reward for buying locally produced, organic vegetables and fruit.

Depending on their commune, they will be able to spend earned survcoins to pay waste management-related or other fees.

Other climate-friendly transactions (earning and spending) will gradually be added to the survcoin ecosystem.



Partners, business model

To cover the survcoin operations and business development costs, our plan is to make marketing and sponsoring agreements with partnering organisations and companies.

To facilitate acceptance of survcoin by communes and other institutions, we intend to build on existing subsidies and legal obligations targeting carbon footprint reduction and energy efficiency.

Funding

ŒUVRE
Nationale de Secours
Grande-Duchesse Charlotte

IT partner

InTech
POST LUXEMBOURG Group

Impact Assessment

LUXEMBOURG INSTITUTE OF SCIENCE AND TECHNOLOGY | LIST

The survcoin is the UBI’s ideal climate action complement

survcoin

UBI

One of the obstacles preventing many people from participating in carbon footprint reduction efforts is sheer economic pressure.

Once UBI frees up time, attention and energy, citizens get to dedicate themselves to enact changes to their diet, mobility, habitat, lifestyle etc. with the help of survcoin-denominated transactions.


We urgently need new ways to measure value creation