## THE ROLE OF BIOCONTROL IN DELIVERING SUSTAINABLE DEVELOPMENT AND FOOD SYSTEM TRANSFORMATION

#### WHO WE ARE

Forum for the Future is a leading international sustainability non-profit with offices in London, New York, Singapore and Mumbai.

We specialize in addressing critical global challenges by catalyzing change in key systems using systems change and futures tools.

For almost 25 years, we've been working in partnership with business, governments and civil society to accelerate the shift toward a sustainable future

# OUR RAPIDLY CHANGING WORLD

### FROM SYSTEM SHOCK TO SYSTEM CHANGE-TIME TO TRANSFORM

THE FUTURE OF SUSTAINABILITY

### WHAT DO WE MEAN BY DYNAMIC AREAS?

A shift away from trends – the direction of travel of a single factor.

Instead we are looking for systemshifting dynamics – feedback loops, tipping points, thresholds or shocks – all of which can shift systems





# **BIOSPHERE BREAKDOWN**

How can we seize the opportunity to protect the planetary systems on which we all depend?

Evidence that Amazon could irreversibly tip if deforestation goes above 20% (at 17% now)

Followed by Boreal and SE Asia forest tipping points

With the possibility of ice-free Artic summers

Tipping points are actually cascades

## **ECONOMIC CRISIS & REFORM**

How can we ensure the economic model shifts from an extractive one, working for the few, to one that enables thriving people and a thriving planet?

Current financial system is a major system 'lock-in'

Crisis exacerbated by the lack of financial reform since 2008, standard monetary policy has run out of road

If Europe's Green New Deal is emulated and delivered, a different system could emerge. Ditto Amsterdam and Donut Economics.



# **TECH & GOVERNANCE NEXUS**

Will technology lock us into an unsustainable trajectory or enable a regenerative future?

 Al algorithms, fake news, leading to fragmentation, amplifying fear and divisions

 Centralising power dynamics – control, surveillance, manipulation – risk being amplified by AI and manipulated by authoritarian political regimes – locking in structural inequalities

• **BUT!** Digital channels can equalise access to a range of basic needs from finance to healthcare. And sensing technology could protect ecosystems

## **EQUITABLE TRANSITIONS**

How can we ensure a socially just transition to the future we want?

The rise of grassroots movements calling for an end to structural inequality

Attempts at participatory democracy

A mid-decade generational transition

# **REGENERATIVE OPENINGS**

Are regenerative approaches the critical unlock to the challenges of the decade ahead?

Regenerative agriculture moving into the mainstream

New models of ownership

AD.

New business models

Rise in responsible investment, move away from the carbon-intensive sectors

## WHAT NEXT EMERGING TRAJECTORIES THAT WILL SHAPE OUR FUTURE





#### UNDERLYING MINDSET

"Planetary health and human wellbeing come first, and are interconnected. Deep change to reset the system is possible, desirable and happening. We can't go back to 'before'."

#### **IN BRIEF**

This is characterised by the harnessing of the recovery from the pandemic as a 'reset' to accelerate a fair and equitable zero-carbon transition and enable a shift towards approaches like stakeholder capitalism, 'doughnut economics' and wellbeing budgeting. New business models emerge based on resilience, social equity and regenerative thinking.

TRANSFORM

## HOW MIGHT BIOCONTROL CONTRIBUTE TO THE TRANSFORMATION THAT IS NEEDED?

Biocontrol already makes a significant contribution to sustainability



AND, THERE IS A VERY REAL OPPORTUNITY TO DO MORE – BEING PART OF A SHIFT TO A REGENERATIVE AGRICULTURE SYSTEM

#### CURRENT AGRICULTURE SYSTEM

Profit maximization for a small number of powerful players over the short term

#### Extractive

Economies of scale and intensive, specialized production

Maximize calories produced

Externalizes environmental impacts

Competitive price reduction for consumers

Maximize profit for power holders in supply chains

|                            | REGENERATIVE AGRICULTURE SYSTEM  |
|----------------------------|--|
| Shared goals<br>PRODUCTIVE | Putting more back into the environment and<br>society than it takes out<br>Restores ecosystems services at the landscape<br>level (soil health, water quality, biodiversity) |
| VIABLE                     | Localize and diversify production systems  |
| PROFITABLE                 | Maximize nutrition and public health   |
| FOOD SAFETY                | Resilient: conditions to allow system participants to thrive and adapt   |
|                            | Connection between consumers and production  |
|                            | Equitable distribution of value  |



#### **REALISATION OF THIS OPPORTUNITY WILL REQUIRE SPECIFIC UNLOCKS**

Development of an industry-wide vision and roadmap

A clear and coherent narrative

Engagement with the whole food system

And, a mind set shift?



#### **IN CONCLUSION**

The world is changing rapidly

There will be more shocks, more disruption

A regenerative, resilient food system is a must if we are to deliver the Sustainable Development Goals

Biocontrol has a vital role to play

Are you ready?



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