GSDR 2023 Key message

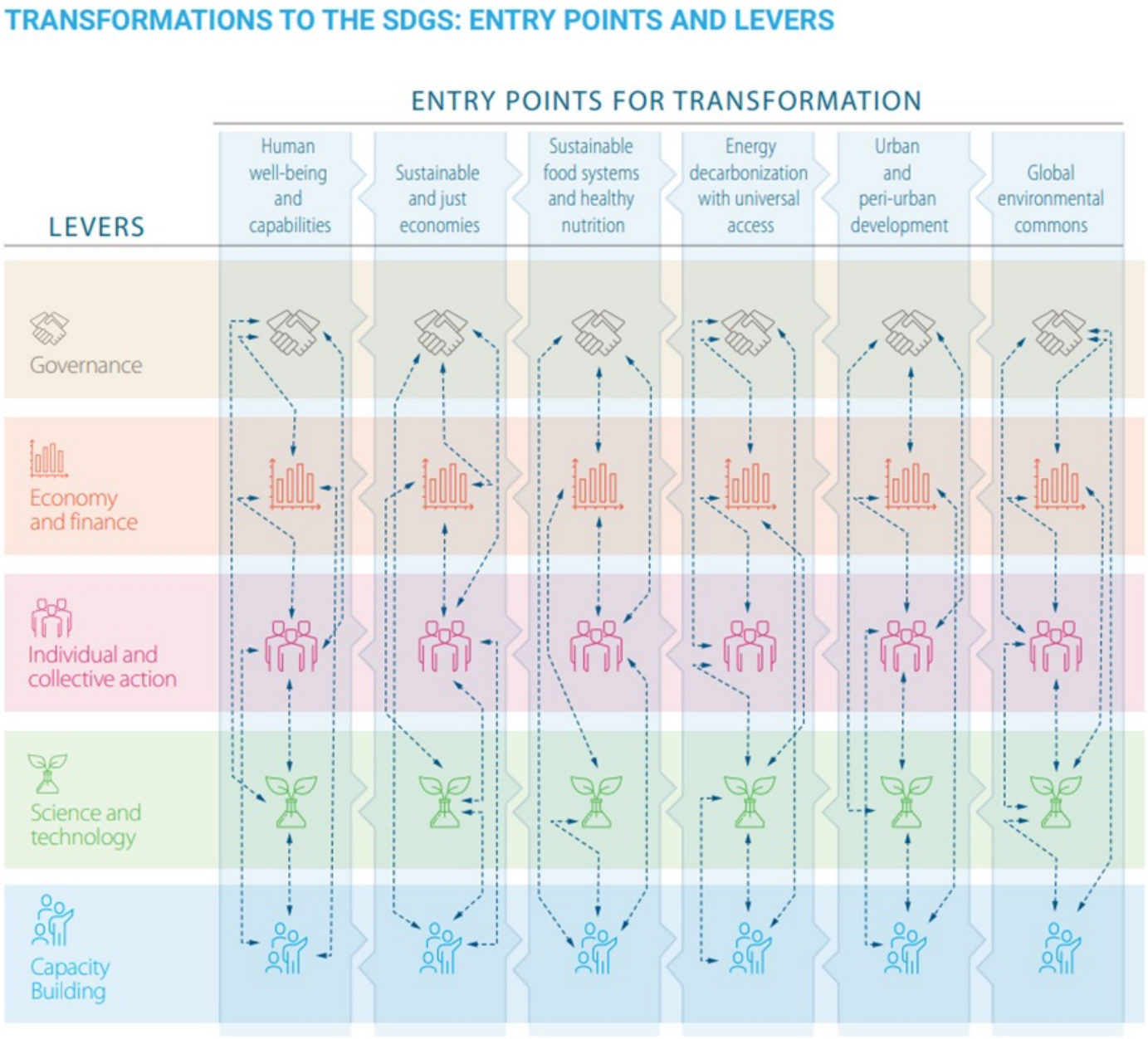
Transformation is possible, and inevitable

- SDGs guide us by governing through goals
- Apply ***levers*** for transformation, tackle ***impediments***

Contents

Transformative change: ***What*** needs to be done?

- Six entry points to transformation (2019 GSDR)
- WHAT? Identifying key interventions
  - Five Levers for transformation (2019 GSDR+ capacity building)
  - Review of scenario literature



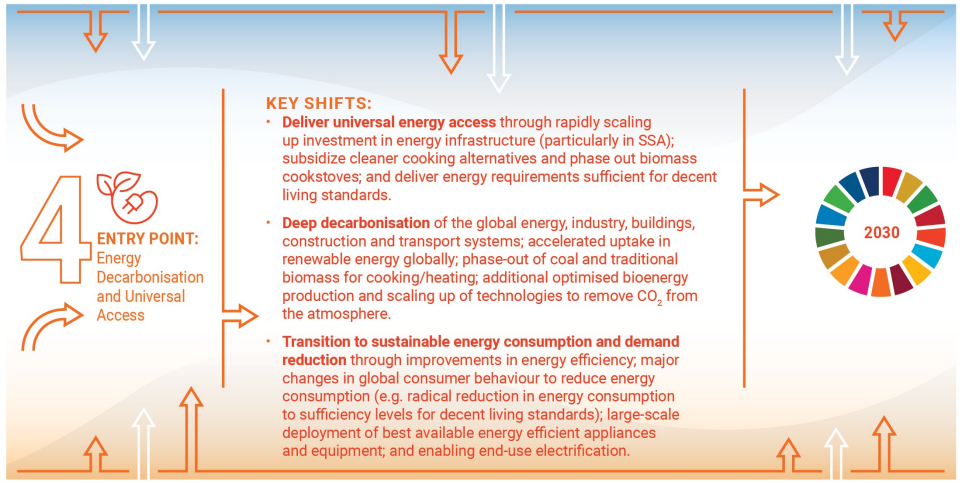
Aligning evidence from scenarios with the entry-points

Example: Energy decarbonization with universal access

- Mandatory renewable energy targets as a tool (governance lever)
- Rapidly scaling up infrastructure investment (economy and finance lever)
- Large-scale deployment of renewables and best available technologies (science and technology lever)
- Major changes in global consumer behavior to reduce energy consumption (capacity building lever/ individual and collective action lever)

ENERGY DECARBONIZATION WITH UNIVERSAL ACCESS: key shifts, example interventions and common impediments sourced from the global scenario literature.

IMPEDIMENTS
Weak institutions and markets and poor infrastructure, capital costs and financing gaps, sunk investments and vested interests, trade-offs between goals, consumptive behaviours.



INTERVENTIONS BY LEVER

GOVERNANCE
Access: subsidies to stimulate the adoption of cleaner cooking fuels/technologies (e.g. 50% subsidy on the retail price) or regulations to near-complete phase out biomass cookstoves by 2030.

Decarbonisation: carbon pricing of fossil fuel CO_2 emissions and subsidies for renewables. Energy system policies for faster phase out of coal (at least 90% capacity retired by 2030 in higher income countries) and near-complete phase out of traditional biomass by 2040, restrictions on nuclear capacity additions and bioenergy potential, and faster phase out of fossil energy subsidies by 2030. Mandatory targets to increase share of renewables in electricity generation (e.g. 1.4% point increase per year) and ban new installations of coal power plants by 2025 (HICs) or 2030 (LMICs).

Demand: introduction of a progressive carbon tax affecting energy demand; regulations to improve energy efficiency; incentives to improve dwelling energy performance and change behaviour to reduce energy consumption; designing and enforcing national standards and labelling for household appliances and efficient equipment; subsidies, appliance rebates and access to credit for lower income households to benefit from modern energy technologies.

BUSINESS AND FINANCE
Access: increase public and private investment in electricity infrastructure in Africa from 1% to 3% GDP per annum to 2030. The cost of providing universal clean cooking access in SSA by 2030 is estimated at USD1.6 to 2.4 billion per year. Total investment for SSA to achieve SDG7 targets for universal access, higher energy efficiency and increased renewables by 2030 is estimated at USD14-28 billion per annum on average.

Decarbonisation: divestment from fossil fuel activities reaching more than 170 Billion USD per year by 2030 and used to partially fund USD910 billion per year on efficiency and low-carbon resources. Recycling of carbon revenues whereby developed countries devote part of their revenues to an international fund that supports clean energy and R&D in developing countries (USD50 billion per annum).

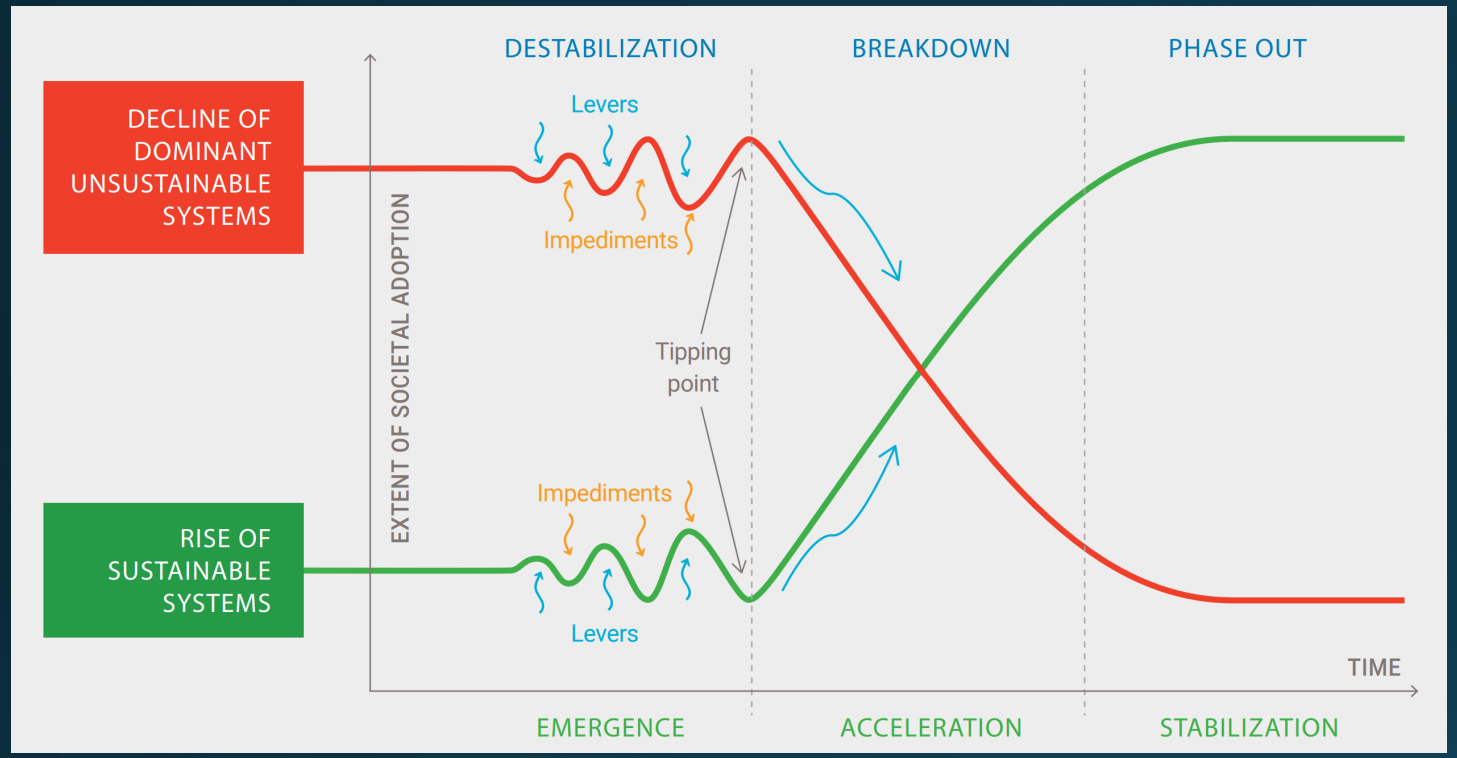
SCIENCE AND TECHNOLOGY
Decarbonisation: public and private investment in innovation in renewable energy technologies; spatially optimised bioenergy with carbon capture and storage.

Demand: promote digital technologies for energy use, transmission and monitoring and innovation in high quality housing with highly efficient facilities for cooking, storing food and washing; low-energy lighting.

INDIVIDUAL AND COLLECTIVE ACTION
Demand: incentivize behaviour change to reduce energy consumption.

CAPACITY BUILDING
Build capacities to implement each lever and overcome impediments including for designing and implementing market conditions, incentives and regulatory settings for investment in sustainable energy infrastructure and improving revenue collection, navigating political resistance from sunk investments in capital stocks, managing trade-offs and competition between socioeconomic and environmental goals, building coalitions and public support in favour of decarbonisation, and shifting towards sustainable consumption behaviours.

How to transform? Dynamics of transformative change



"S-curve" model for transformation: transformation driven through its phases

- Emergence
- Acceleration
- Stabilization

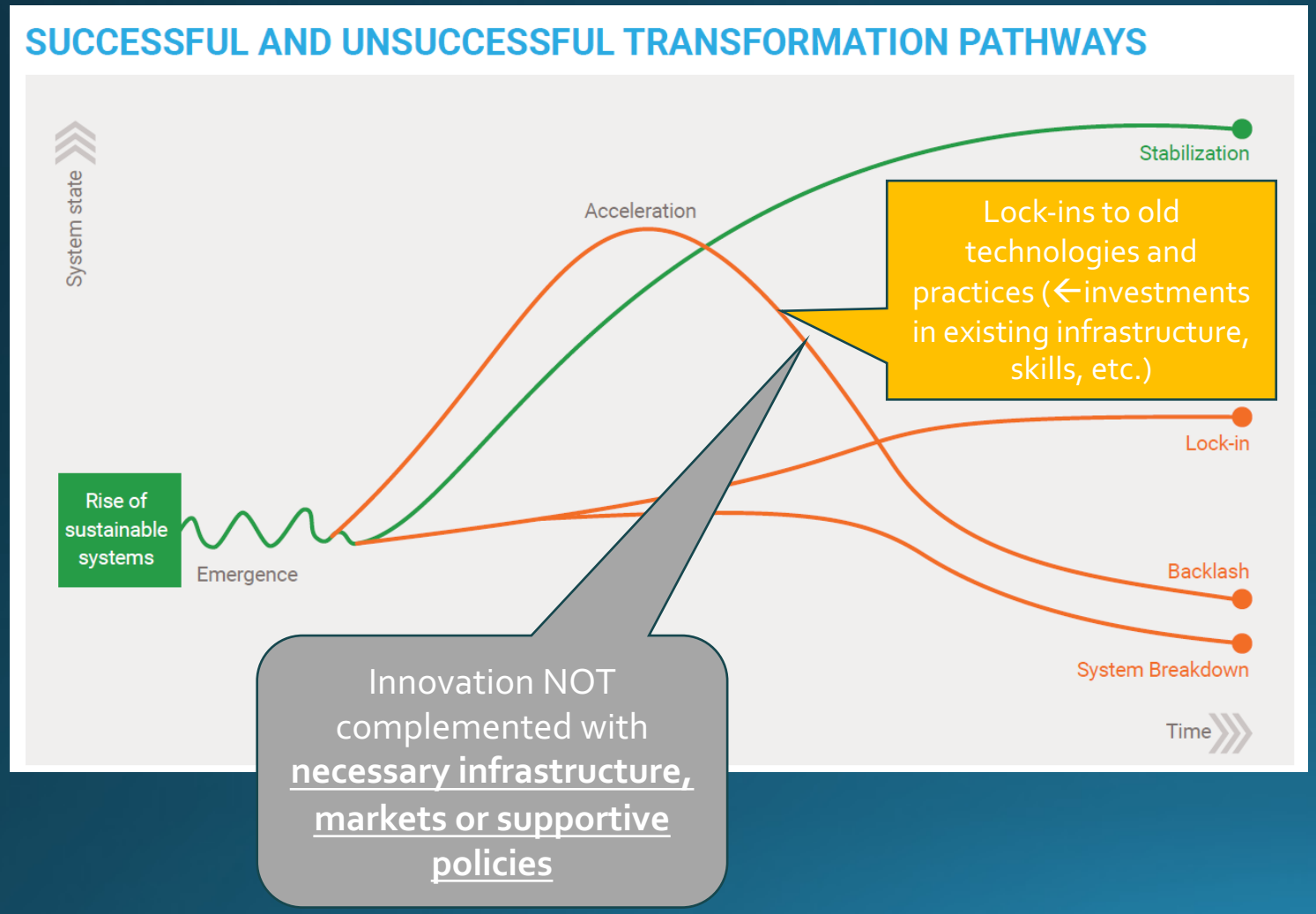
Identify levers enable sustainable solutions

Tipping points:

ex.

- Major societal shifts in perspectives (single-use plastics)
- Innovations suddenly become easier to use or more socially desirable (smart phone)

Tools and Levers for dynamic transformations



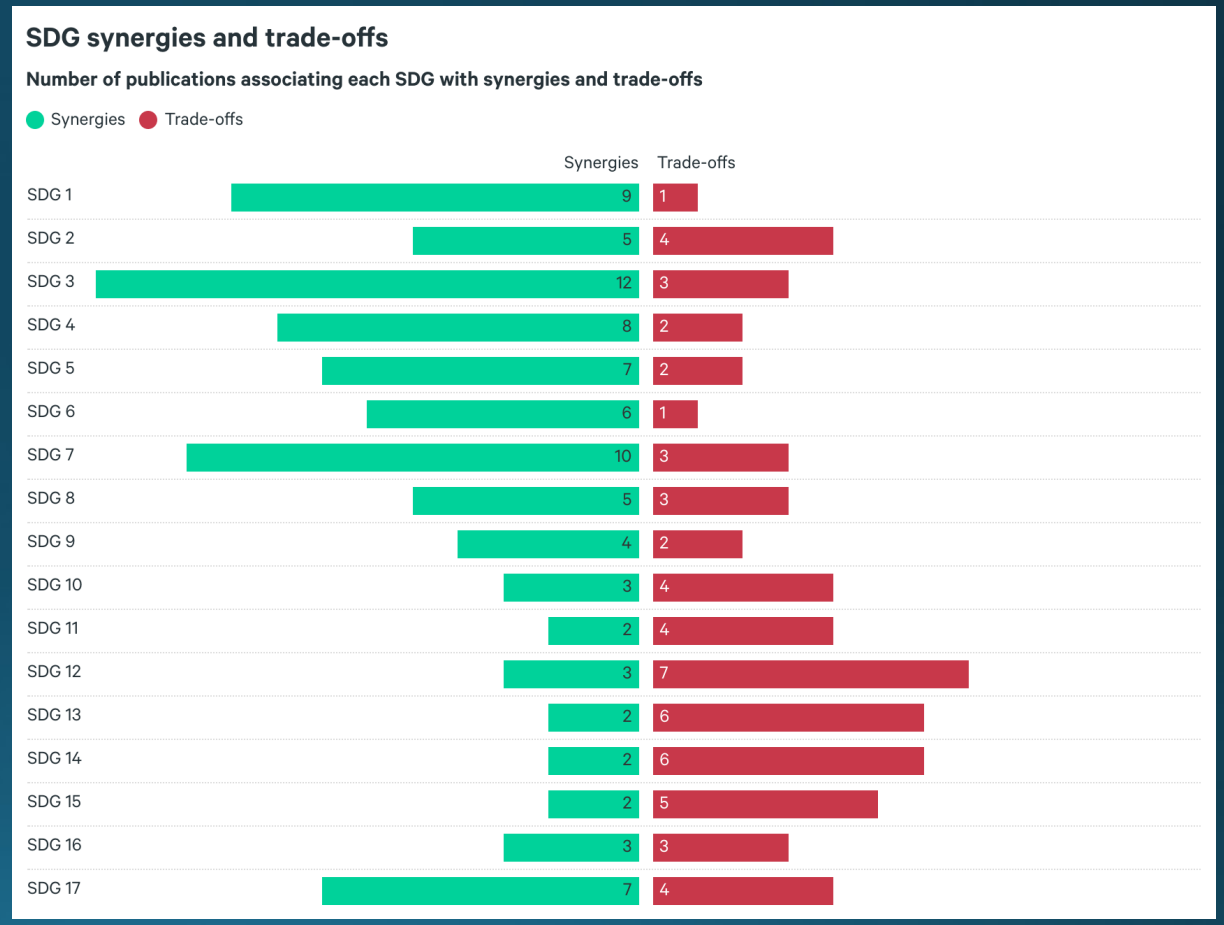
Acceleration is Key

- Nurture innovation
- Give strategic direction
  - Goals Matter
- Foresight capacity
  - Scenario and Models Matter

- Standardization and quality assurance
- Innovation (COVID19 and virtual meetings)
- Powerful actors support new ways of thinking, doing and acting (electric car)

Consider SDG interlinkages

- Review of scientific literature shows mainly synergies
- Synergies: SDGs 1, 3, 4, 5, 6, 7 and 17
- Drivers of trade-offs: SDGs 2 (hunger and food) and 8 (decent work and economic growth)
- SDGs 14 and 15 are most negatively affected by progress in other areas
- SDG interlinkages are context-specific: geography, time, income groups, policy design



Source: Bennich et al., forthcoming.

By interlinking issues using SDGs as a tool, more stakeholders could be on engaged (e.g. Goal 14 and actions against single use of plastic)

Calls to Action

- **Establish an SDG Transformation Framework for Accelerated Action**
  - Member states should set national plans prioritizing key SDGs and bottlenecks
  - Business and local government roadmaps
  - Provide finance and integrate in budgeting
- **Build capacities for transformation**
  - Training, foresight, public engagement, negotiation skills
- **Drive transformation through its phases and manage interlinkages**
  - Interventions for six entry points, assess interlinkages and international spill-overs using science-based tools
- **Improve critical, underlying conditions for SDG implementation**
  - Prevent conflict, ensure fiscal space, focus on marginalized groups
- **Work with science**
  - Invest in evaluation research, global South R&D, knowledge sharing

TRANSFORMATIONS ARE INTERLINKED ACROSS SYSTEMS – COHERENT ACTIONS CAN GENERATE SYNERGIES/MANAGE TRADE-OFFS