The World Bank
and
Brownfield Remediation

Introducing a Guidance Note for Countries in East Europe and Central Asia

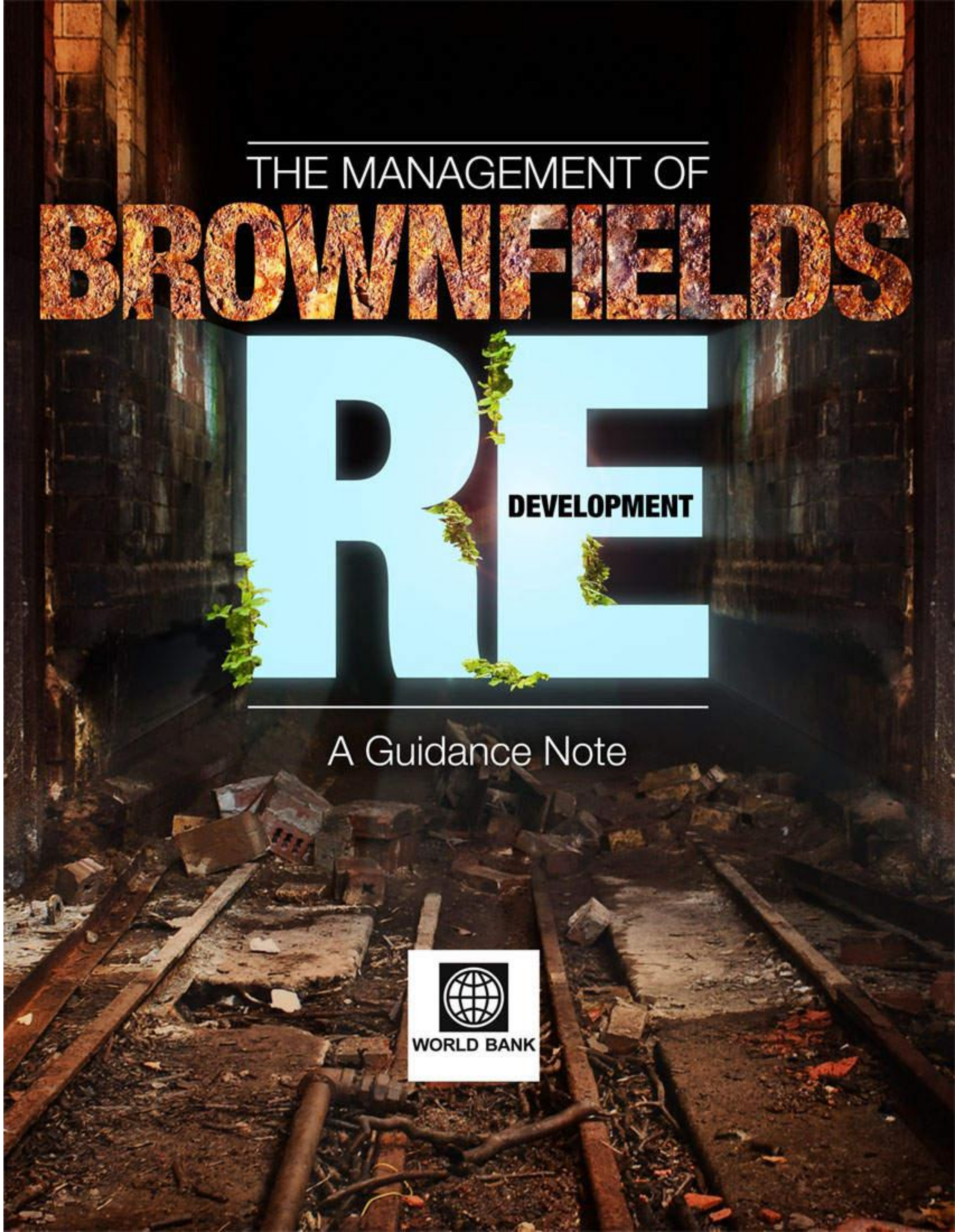
Sumgayit, May 2010

Structure of Presentation

1. **The Guidance Note**
   Definition and Classification of Brownfields
2. **Remediation Approaches to Derelict / Contaminated Land:**
   Dealing with marginally profitable sites
3. **Advocating Good Practice:**
   The steps to brownfields remediation
4. **Brownfields vs. “Standard” Urban Development**
   Mainstreaming environmental issues

The Guidance Note

- Produced 2009-2010
- Based on case studies in Croatia and experience of other countries in Europe and North America
- Intended as pragmatic, nuts and bolts approach to BFR
- Will tell you everything you want to know about Brownfields (and more…)



Guidance Note: Table of Contents

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Incentives for BFR

Potential Value / Assets of Brownfield Redevelopment

- Situated in or near urbanized areas: pressure on land, high demand for commercial space
- Restore economic and fiscal values (currently no revenues due to non-utilization, no tax payment)
- Reduce demand for new “green field” development, promote more sustainable land use planning
- Revitalize urban areas and improve amenities, supporting local quality of life
- Take advantage of existing infrastructure: urban roads, public transport corridors, WSS and power

Major Challenges and Obstacles for BFR

Major Challenges of BFR

- Economy stagnating or even shrinking, low demand for commercial or private land
- Unclear ownership, or site is property of land speculators without (immediate) development interest
- Unclear legal / administrative situation regarding remediation targets and environmental liabilities
- Investment concept: future use has to be matched with demand for, potential and constraints of remediated BF
- Technical aspects: demolition of structures, waste removal, decontamination, ground improvement

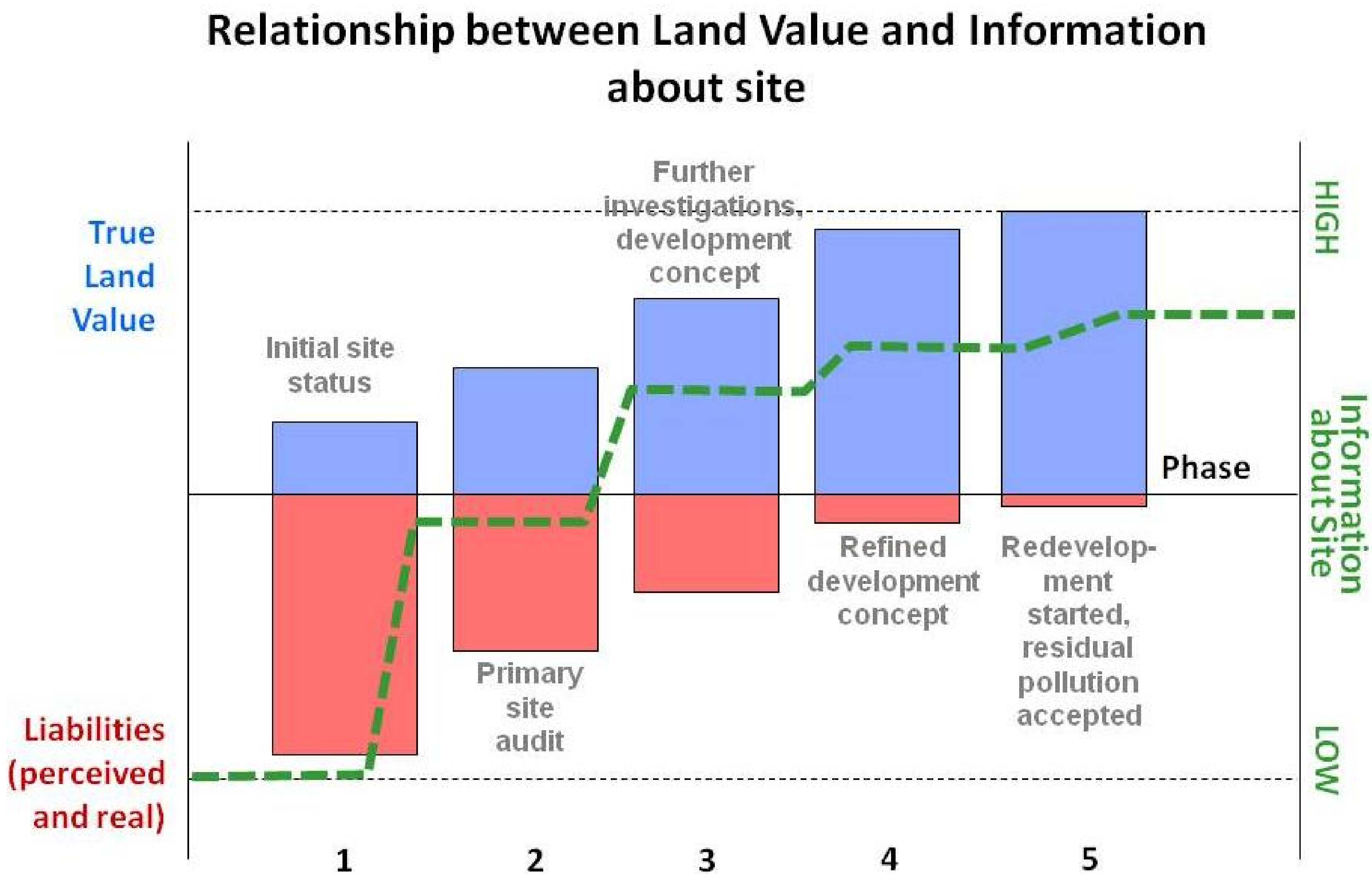
Types of BFR regarding Remediation Perspectives

‘A’ Sites: Sites that despite contamination and liability problems are economically attractive enough to be redeveloped through a sole private effort.

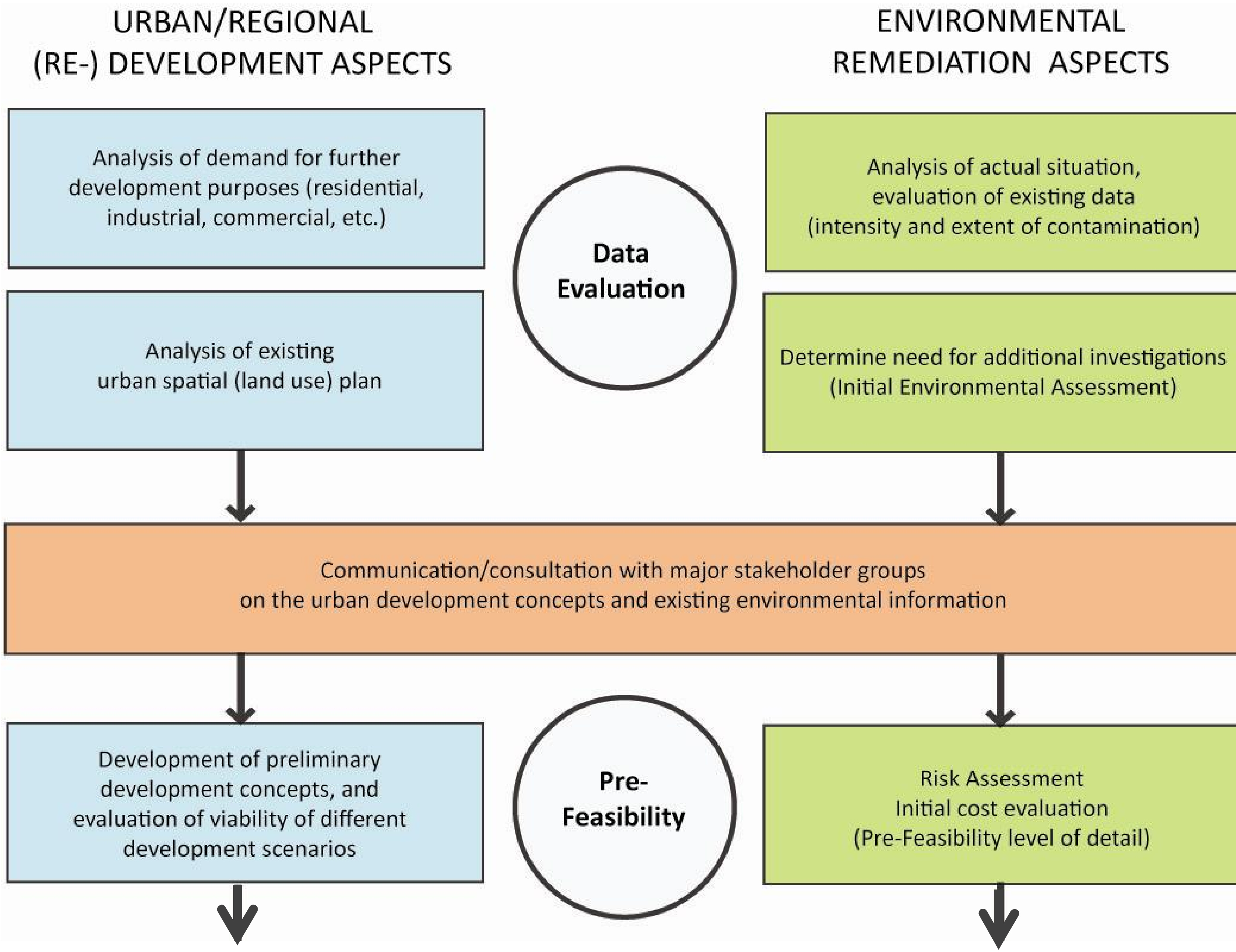
‘B’ Sites: Sites whose future profitability is uncertain due to a number of unknowns (the severity and extent of contamination, unclear ownership, sluggish or inactive real estate market, etc.).
These sites are prime targets for public-private partnerships.

‘C’ Sites: “Hardcore cases” that can only be redeveloped through a concerted public effort, due to high (perceived) risks and questionable economic viability.

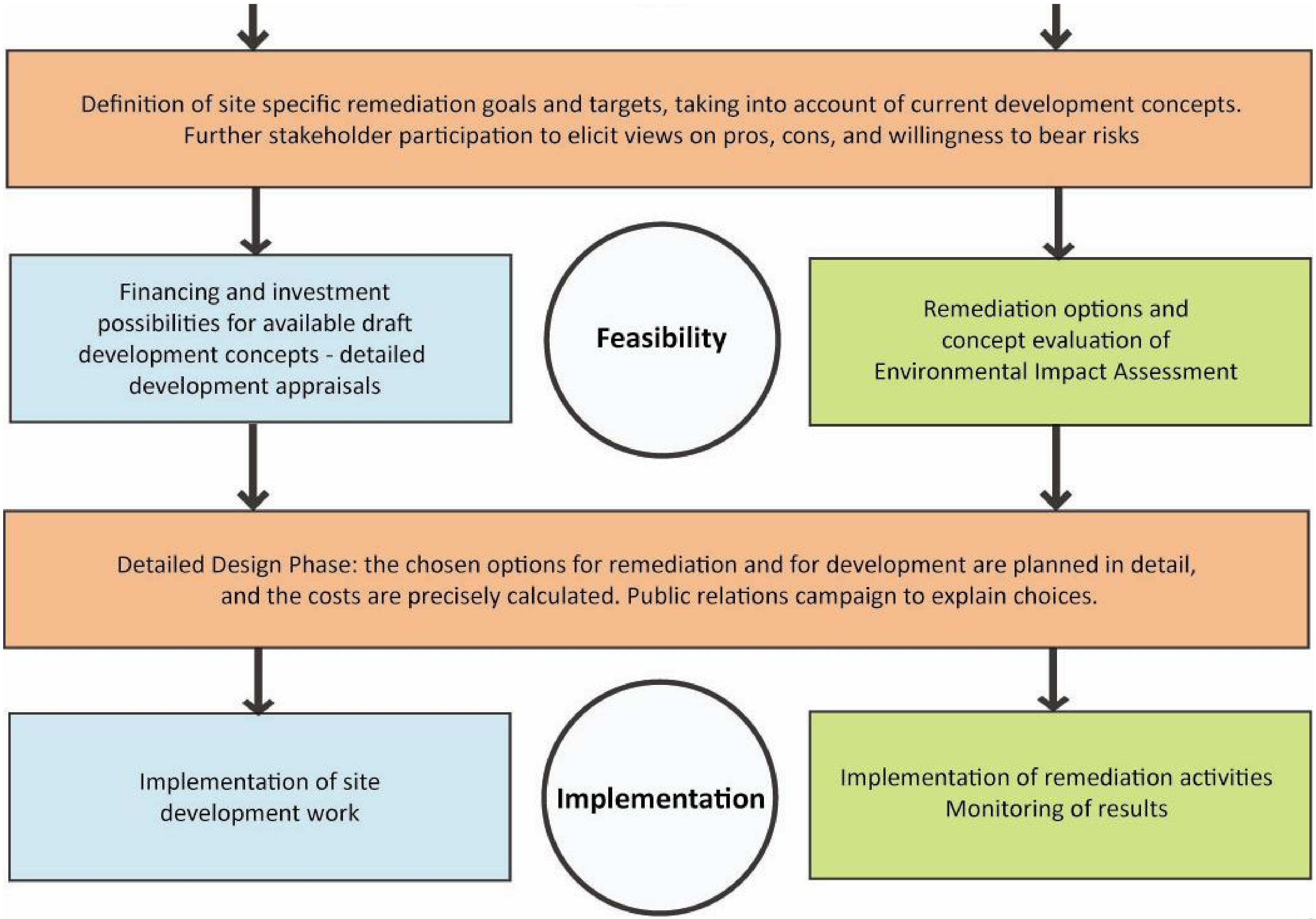
B-Sites: Facilitating Development through Information Generation and Transparency



Stages of BFR

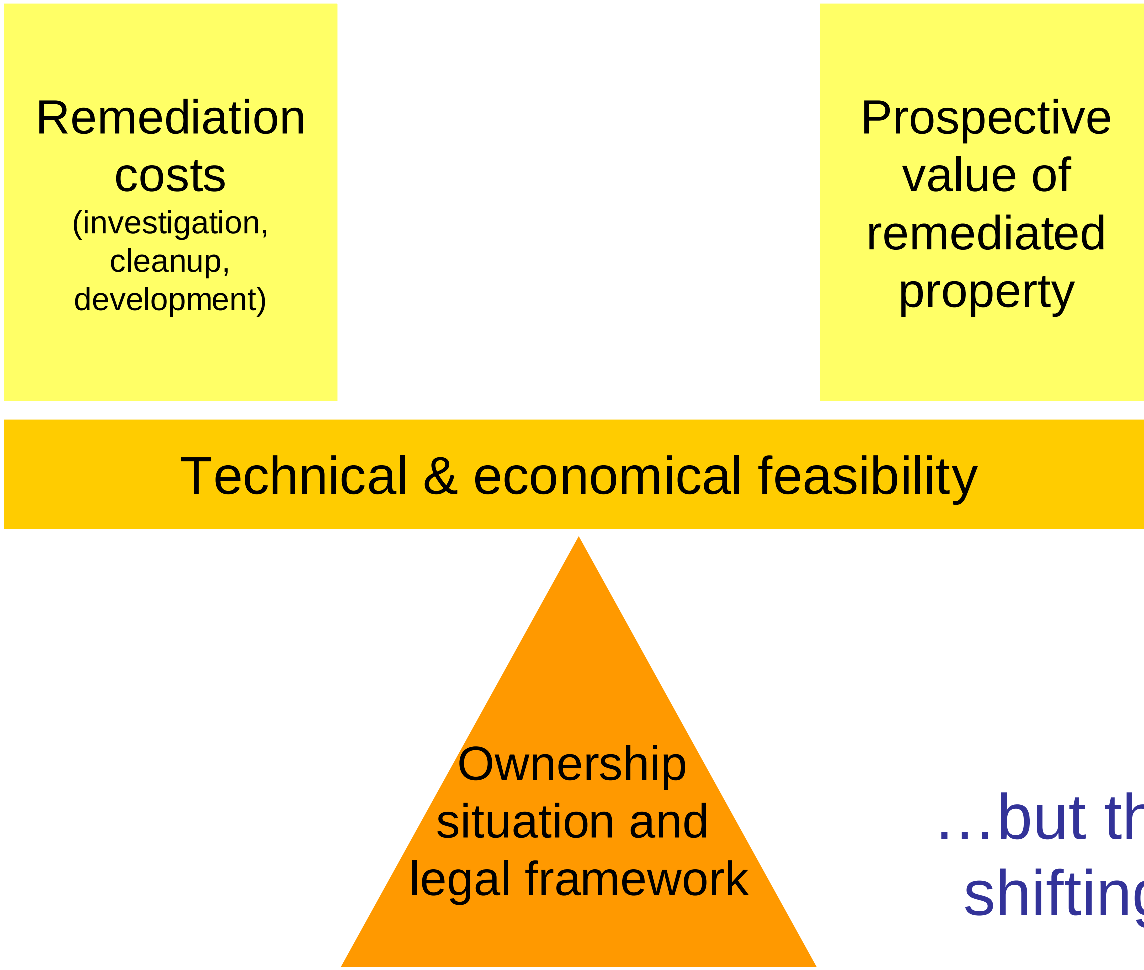


Stages of BFR



Factors influencing BFR

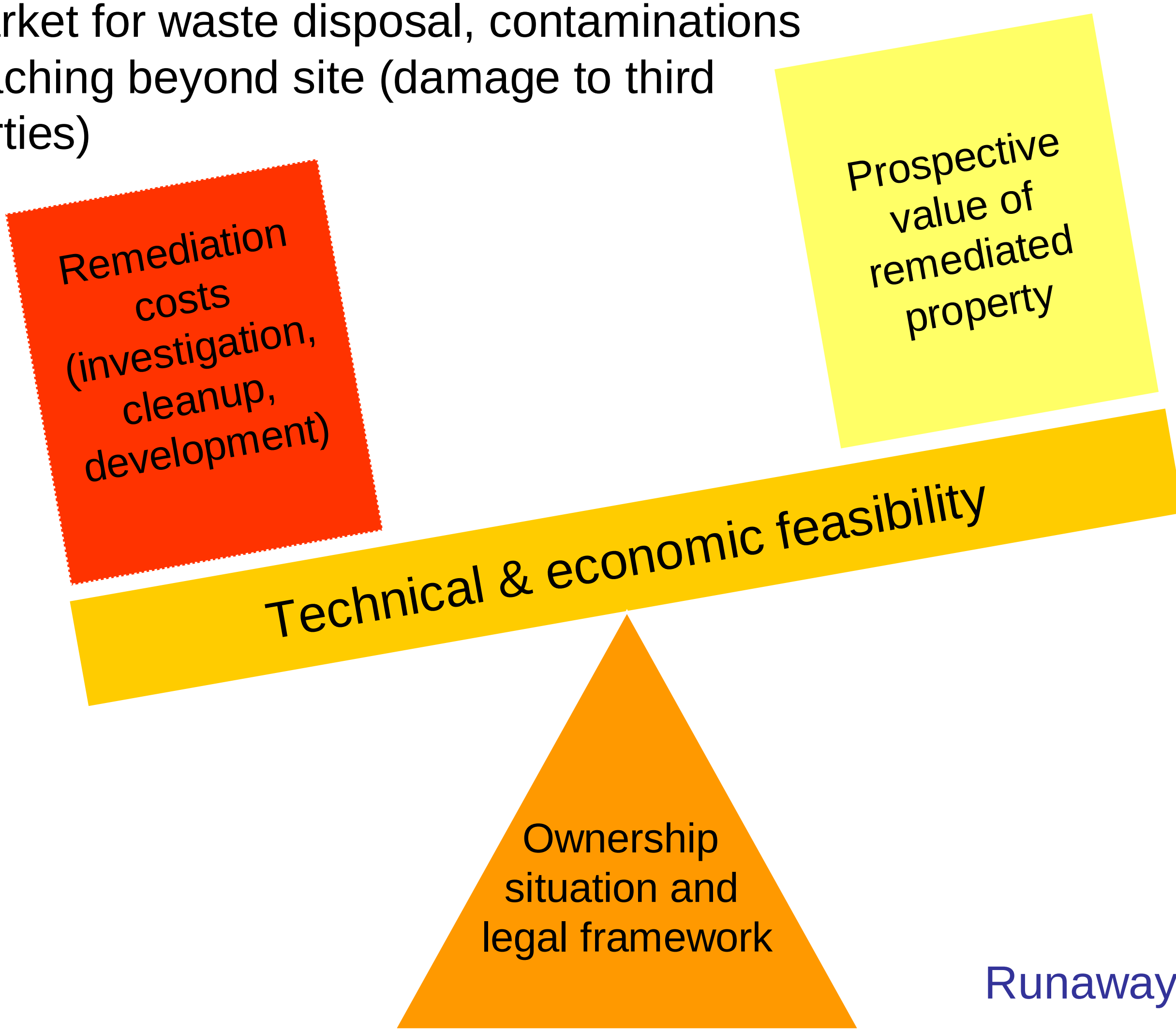
Feasibility of BFR: A “Simple” Equation



…but there are risks of shifting the balance…

Factors influencing BFR

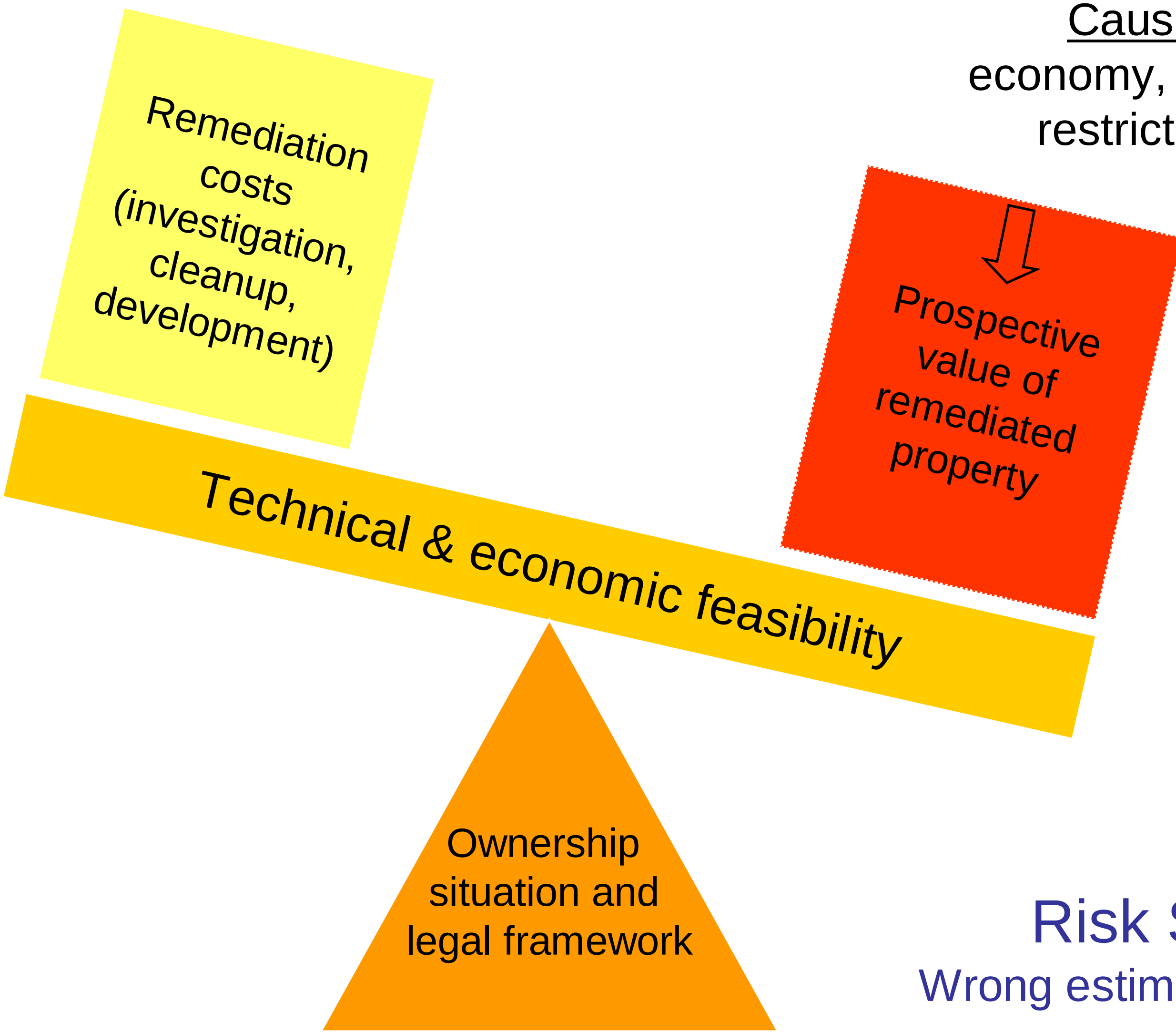
Causes: e. g. lack of clear legal regulations, technical difficulties, volatile market for waste disposal, contaminations reaching beyond site (damage to third parties)



Risk Scenario 1:
Runaway of Remediation costs

Factors influencing BFR

Causes: e. g. slowing economy, lack of demand, restrictions on property market

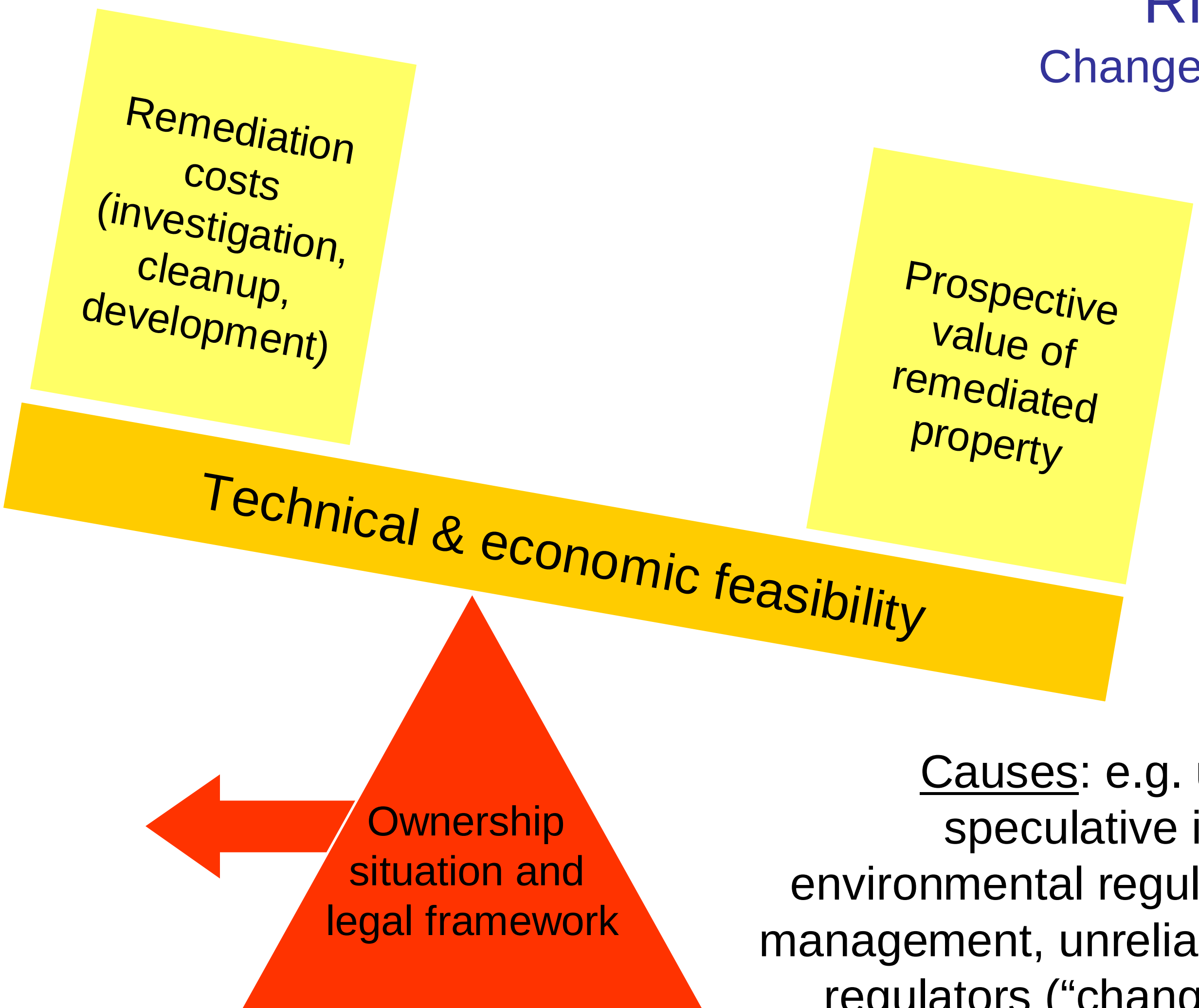


Risk Scenario 2:

Wrong estimate of resulting property value

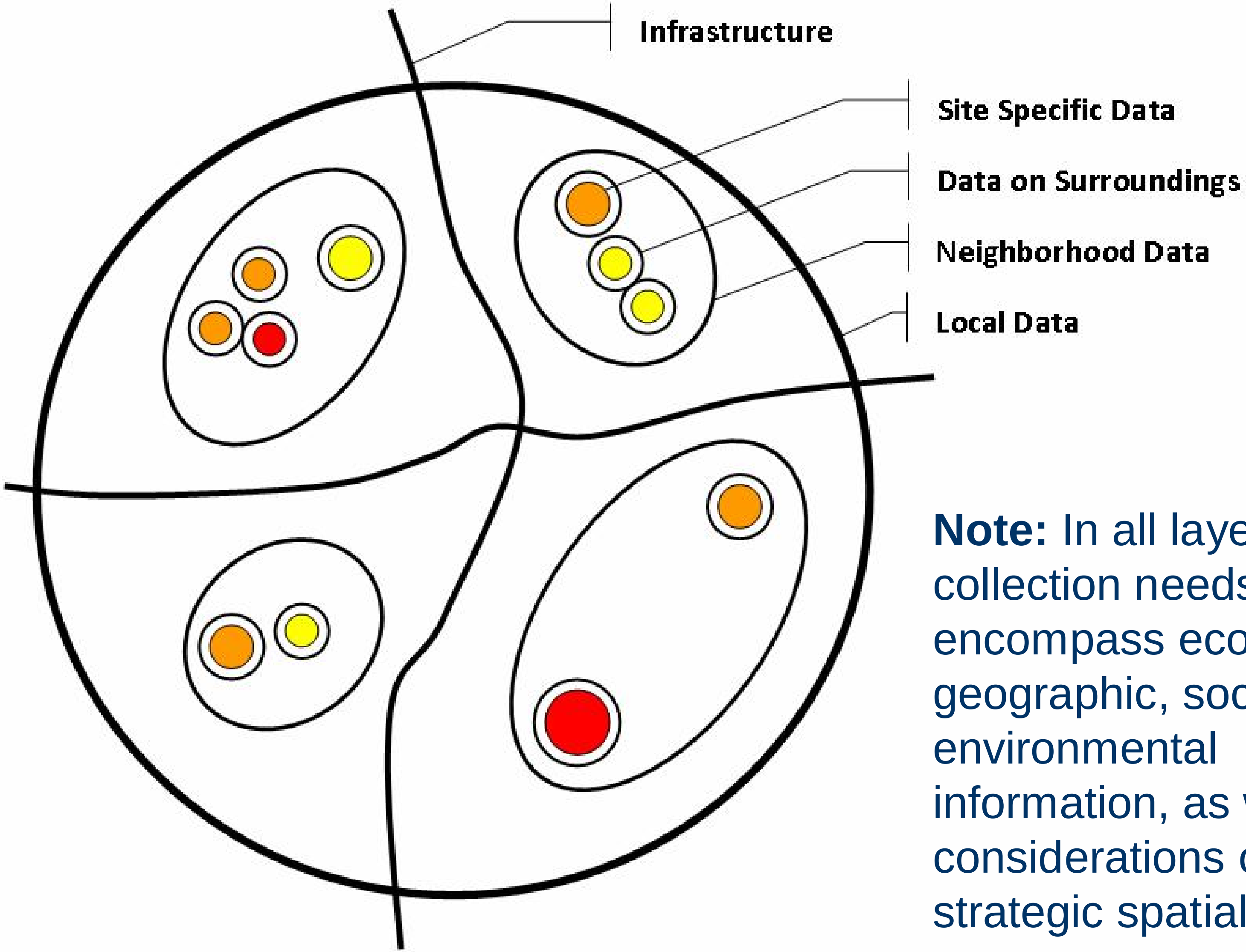
Factors influencing BFR

Risk Scenario 3:
Change of market situation



Causes: e.g. unclear ownership, speculative interests or unclear environmental regulations, lack of land management, unreliable performance of regulators (“changing the goalposts”)

Layers of Data Collection



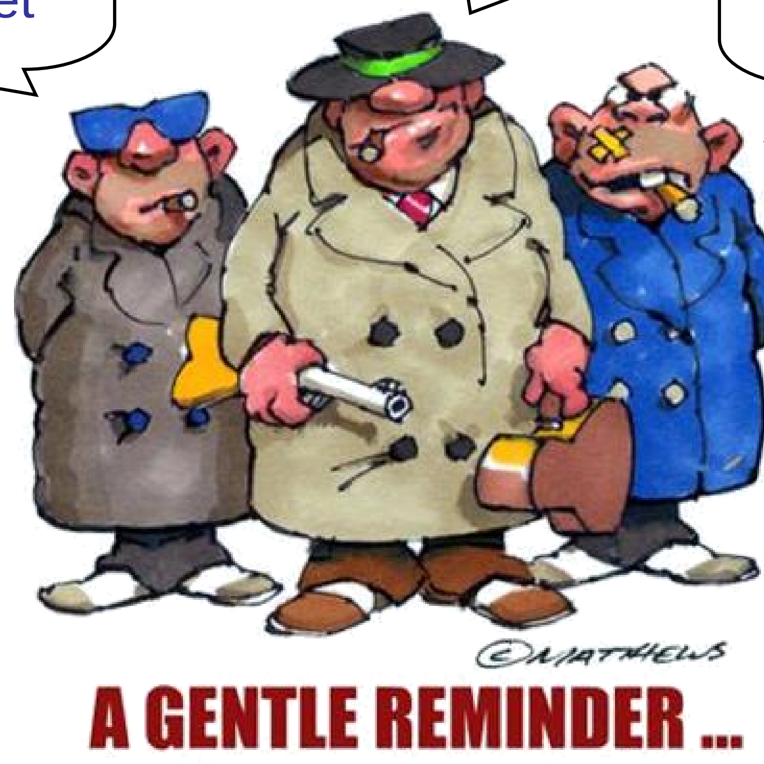
Note: In all layers data collection needs to encompass economic, geographic, social and environmental information, as well as considerations on strategic spatial planning.

Conditions for effective BFR

Solid legislation on land ownership, free land market

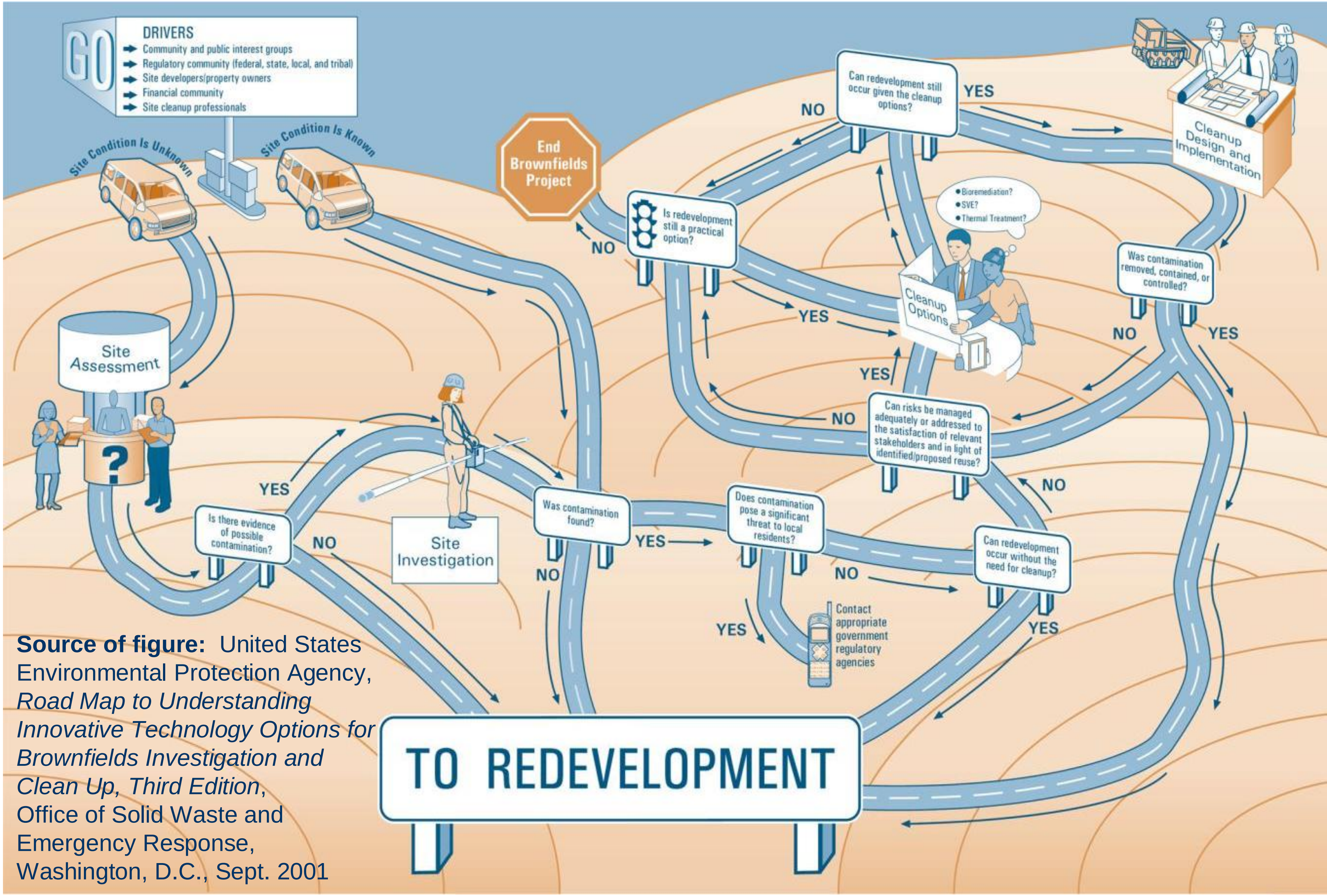
Basic capabilities in remediation and redevelopment

Environmental legislation in place and enforced



BFR does not work equally well under all circumstances…

The Road Map to BFR: Helping to Navigate



Source of figure: United States Environmental Protection Agency, *Road Map to Understanding Innovative Technology Options for Brownfields Investigation and Clean Up, Third Edition*, Office of Solid Waste and Emergency Response, Washington, D.C., Sept. 2001

Conclusions

- BFR can involve high risks - but many sites have less contamination than perceived and many projects are possible at reasonable remediation cost
- BFR can also have high benefits - economic, fiscal, environmental, and social
- The timing of costs and of benefit flows requires creative financing
- Transparency is critical to public acceptance
- Partnerships and visionary leadership are also key to success
- Demonstration projects, even small, can help generate interest and support
- The World Bank could provide assistance through knowledge sharing, technical assistance, and financing of related public investment.

Thank You!

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