



# Reimagining Mine Closure

## *Bringing Solutions to Coal Transition*

***CEE Coal Transition Webinar: “Technologies & Solutions for Coal Transition”***

5<sup>th</sup> March 2021

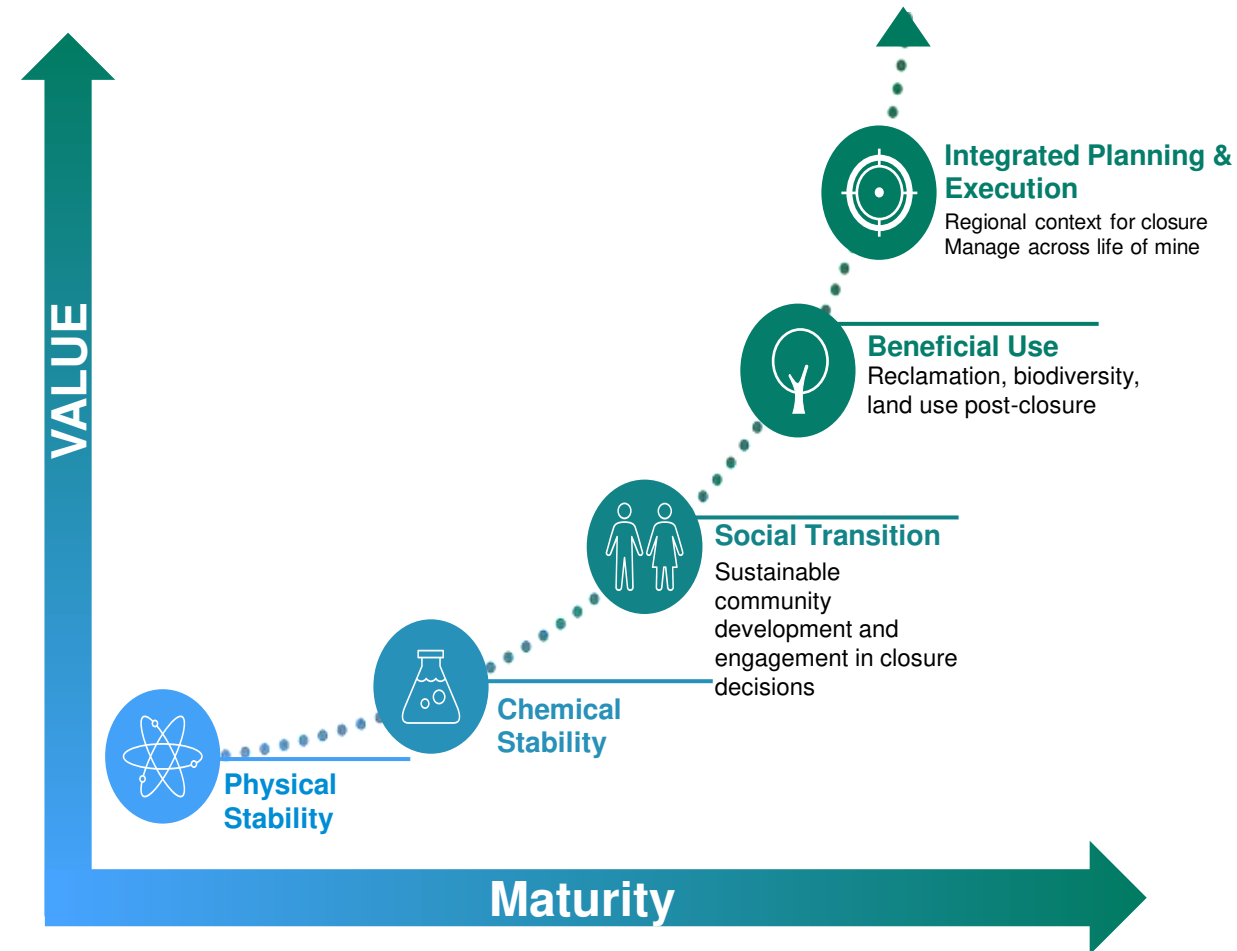
© Copyright 2016 by ERM Worldwide Group Limited and/or its affiliates ('ERM'). All Rights Reserved.  
No part of this work may be reproduced or transmitted in any form or by any means, without prior written permission of ERM.

*The business of sustainability*



# The Challenge

- The transition from coal is becoming central to achieving a net zero emissions world in 2050. Two-thirds of it is burned to generate electricity.
- But with coal mine closure comes huge changes and challenges – what comes afterwards?
- Coal Transition creates societal as well as economic challenges but also opportunities to reshape and reimagine.
- Post-closure considerations need to include a broad range of options and buy-in in order to provide opportunities and arrest the negative socio-economic impacts that will be felt at a local and regional level.
- It requires a collective vision .... of creating a lasting positive legacy.



# Coal Transition – its not a new thing!

## Wales: Experience of Mine Closure and Rehabilitation

- At its peak, Wales was the largest exporter of coal in the world – 620 mines, employing 271,000 people (1962).
- Mines closed through the 1970s and 1980s –global economics - move away from heavy industries.
- Welsh Development Agency (1976). Key aims were:
  - Further the economic and social development of Wales
  - Promote efficiency in business and international competitiveness
  - Further the improvement of the environment
- WDA were the key actor channelling funds from central government and building expertise across the whole piece.
- Similar with Germany and closure of East German lignite pits.



*1,000 plus sites  
7,800 hectares reclaimed  
£315m net cost*



The special problem for coal field transition is by the very nature of the geology these are concentrated problems, with a regional context. The social dynamics are that mining provides the main economic driver. That the miners need to be willing to pursue transition, and education is key.

# Underlying Principles Common to Successful Transition

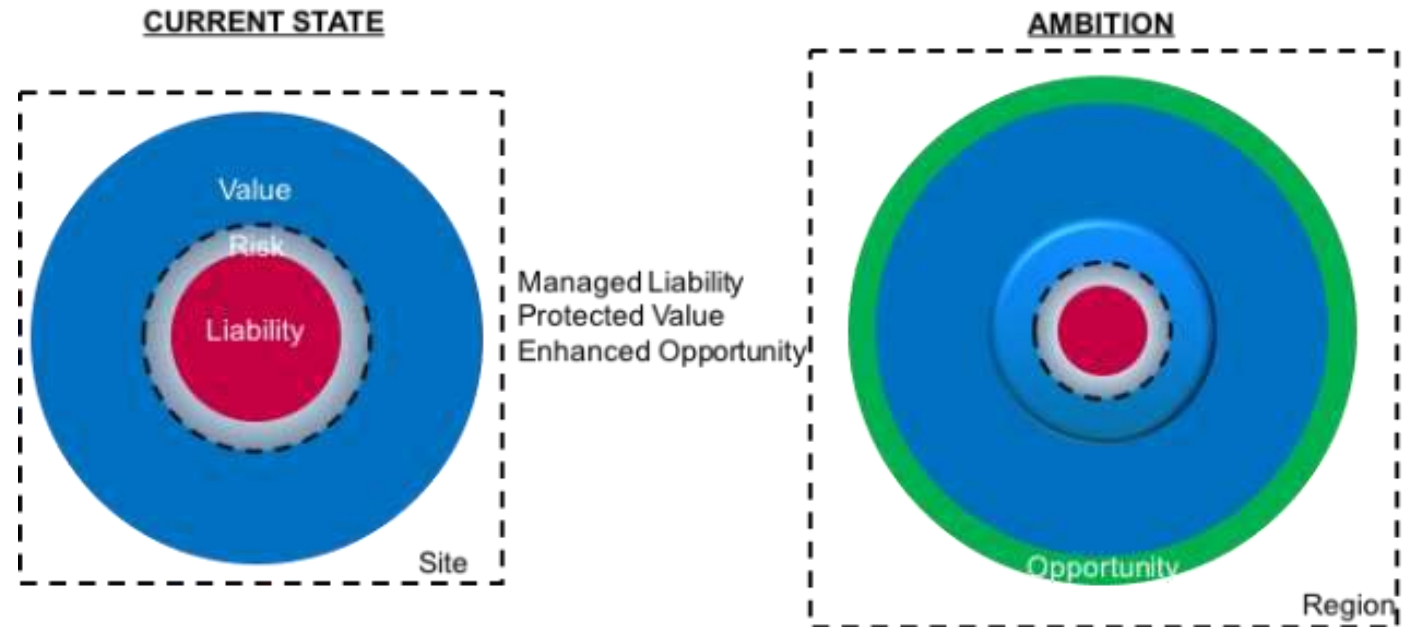
- A mine's operational phase is a temporary activity within a broader regional socio-economic context.
- The boundaries of closure extend beyond the “fence line” to include the area in which the asset conducts its activities.
- There is a need to challenge base assumptions (risks and constraints) and identify opportunities as early as possible.
- There is a need to include all shareholders, all those impacted.
- Need to consider regional and national governmental and/or private investment as enablers of future shared value.
- Relinquishment of asset lands is not a prerequisite.

**The number one factor** in our experience common to successful reimagining is a clearly articulated vision for the region and the role that the mining assets play post-closure in the community.



# Transition Needs to Enable a Different Kind of Conversation

- Stakeholders need to be willing to jointly approach closure as a *regional* discussion about:
  - The future and not a debate around minimum site environmental and social commitments.
  - Regional Opportunities that can arise from different closure outcomes
- Mining Companies become an actor in the system instead of the single proponent, creating a ***shared value approach***



An asset's operational phase is a temporary activity within a broader regional socio-economic context

# Stakeholder Engagement to Build Economic Diversification

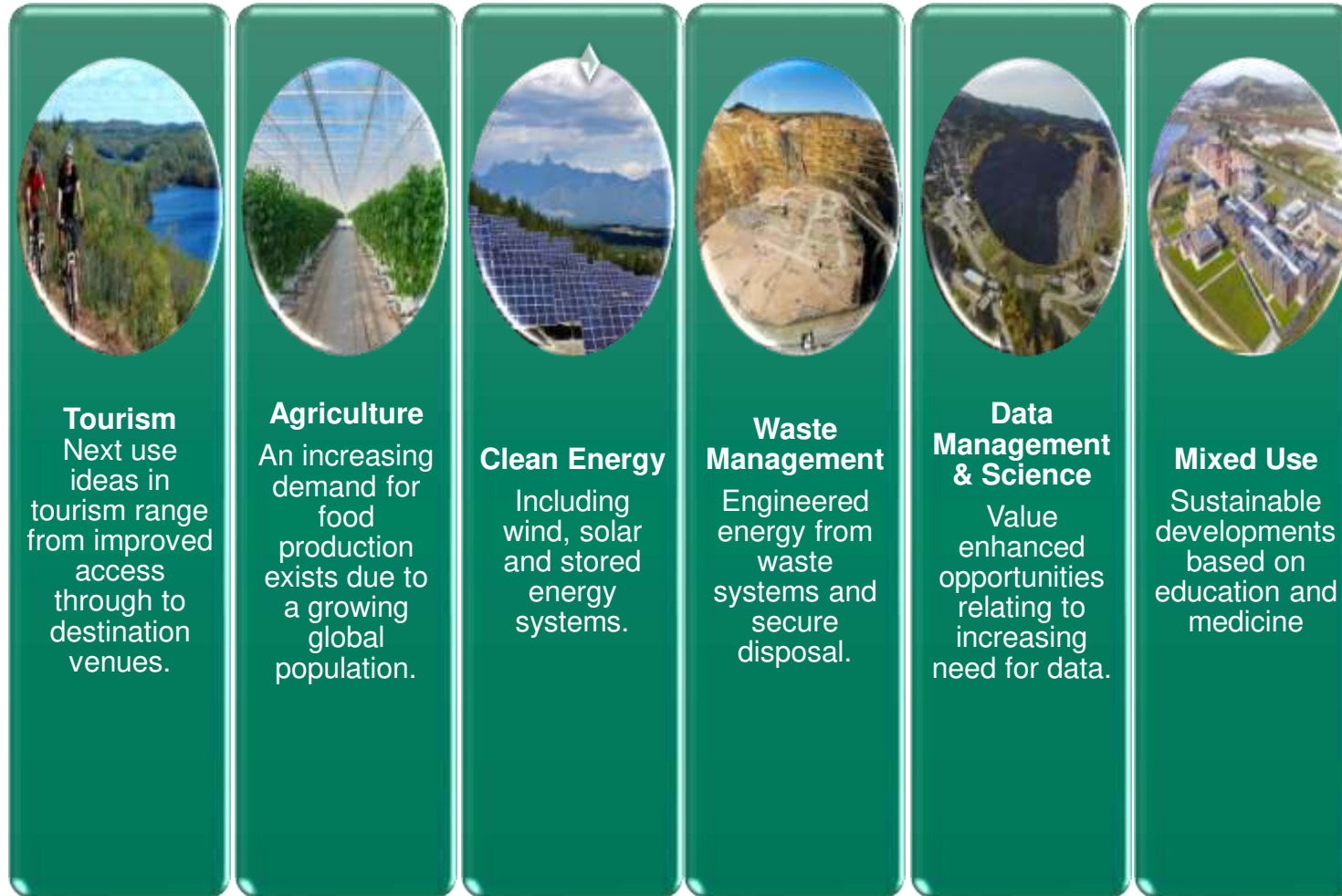
- In 2010, Vale announced that it would be closing its smelter and refinery in Thompson, Manitoba by 2015 with the estimated loss of 500 jobs.
- Recognizing the urgent need to identify economic development opportunities that could help reduce the impact of the closure, the City of Thompson embarked on a participatory planning exercise involving citizens, the City, the chamber of commerce, other levels of government, the mining company, as well as five First Nations from the region.
- Thompson Economic Diversification Working Group (TEDWG), developed action plans that addressed either bottlenecks to economic development or opportunities for diversification and formed a new regulatory framework and the individual action plans form a comprehensive framework for sustainable economic diversification, development and growth in the Thompson Region



## Lessons Learned:

The TEDWG ensured that both local and regional stakeholders were fully engaged in planning for the long-term sustainability of their community.

# Drive Beneficial Outcomes



- Developing repurposing options prior to the end of a asset's life drive:
  - beneficial outcomes both in providing a next use and continued socio-economic activity in the area;
  - the alignment of studies allowing expenditure to be minimised through creative thinking; and
  - solves multiple emerging challenges at one time, such as climate change/renewable energy/reduced carbon footprinting.
- Creating the vision and keeping it flexible and iterative is key
- Supporting vision with right local and regional policy frameworks is also key.

# Driving Beneficial Outcomes..... Examples



**Eden Project:**  
*Transforming  
Legacy sites to an  
Educational charity  
and social  
enterprise and  
tourist attraction*



**Streamsong  
Resort:**  
*Seeing a vision and  
delivering a world  
class resort*



**BP Llandarcy:**  
*Positive Legacy  
Creation through  
Innovative Legal  
and Shareholder  
mechanisms*



**Ebbw Vale:**  
*Sustainable  
regeneration driven  
through local and  
national government  
involvement*



# Driving Beneficial Outcomes..... Examples



**Baltimore:**  
*Commercial sale and reuse of a former pharmaceutical manufacturing site*



**The Lady of the North:**  
*Innovative approaches to rehabilitation creating a springboard for future economic stimulus*



**Ffos Las Race Course:**  
*Planning reclamation of the site to fit in with a regenerative masterplan and repurposing*



**Lusatian Lake District:**  
*An end to coal and economic rebirth across a whole region*

# Conditions for Successful Regeneration/Repurposing

- **Post-mining vision:** developed from the outset iteratively, following thorough examination of all options
- **Understanding Local Context:** based on thorough understanding of local environmental, social and economic conditions which is backed by data and is supported by the key stakeholders
- **Liability Protection:** includes a mechanism for cost effective exit with no residual liabilities
- **Leadership:** delivery is led by a innovative and entrepreneurial leader who is credible and collaborative with all stakeholders
- **Effective Funding:** funding plan in place to deliver vision, drawing on full range of public and private sector sources
- **Measurable Outcomes:** established system for managing and measuring performance against objectives





**Simon Tillotson**

Partner

[simon.tillotson@erm.com](mailto:simon.tillotson@erm.com)

*The business of sustainability*

