Extremely rough outline of CCDR inputs – mainly illustrative and incorporating the ideas discussed in our meetings

As Figure 1 illustrates heat rises are expected to affect firms across Y% of the country’s landmass. These [heat level rises] are expected to be most sever outside the economic centers in Gauteng and along the coast. Overall Z% of the economy is currently located in areas where [heat level rises of Y are expected]. Firms operating in the manufacturing and services sectors in these areas can be expected to experience [substantial productivity losses] when the [number of hot days in a year] exceeds [Y]. These can be as much as [Z per year per worker]. These impacts are greatest for [labor intensive firms] in sectors such as [XXX]. Larger firms with better access to capital are often in a position to counteract these impacts through investment in adaptation including spending on [air conditioning], […] and […]. These expenditures can be substantial. For example [Y% of GDP by some estimates] which roughly suggest investments of around Z% of GDP will be needed by firms to adapt to the heat level gains. Many SMEs can be expected to struggle to make these investments leading to increased concentration of economic activity in larger firms. The heat rises will also make it more difficult to develop the manufacturing and services sectors in these areas. This is an extra impediment to areas which are already relatively low income. The areas most affected by [heat level rises] have incomes that are [X%] of those [than those that are least affected].

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| Figure 1: Temperature [stress] projected for 20X0 relative to current centers of economic activity in South Africa |
| *The map shows ….explain how to interpret it* |
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Increases in [water stress] will also have direct impacts on firm performance in a number of [manufacturing] sectors such as [X], [Y] and [Z]. As Figure 2 illustrates water stress is expected to be firms along the Cape coast as well [firms in the interior of the country]. This has the potential to affect firms’ operations through [higher water tariffs], [the costs of buying water from tankers] or [water shortages]. Firms can adapt to these challenges by increasing expenditure on [storage tanks?], [water recycling] and [similar]. A [bottling plant] can spend as much as [$X] to reduce its reliance on water from the central lines. Ultimately, these costs can be expected to be passed onto consumers.

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| Figure 2: Water [stress] projected for 20X0 relative to current centers of economic activity in South Africa |
| *The map shows … explain how to interpret* |
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