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## RTD challenge

- › research costs have grown in the past five years, on average by 47% across all industries (ETEPS '11)
- › research costs will increase by ~ 30% over the next five years
- › complexity of the R&D process reinforces the need for collaboration
- › Permanent test bed (CERN, ITER, ESS ... Bornholm)

## Resource pooling

- › R&D intensity: pharma 14%, car 7%, energy 1% of turnover
- › Smart, variable geometry coordination (COST scheme and Joint Programmes)
- › Exploitation of ERA-Nets
- › Are € 50 M projects scalable to full scale demonstrations ?