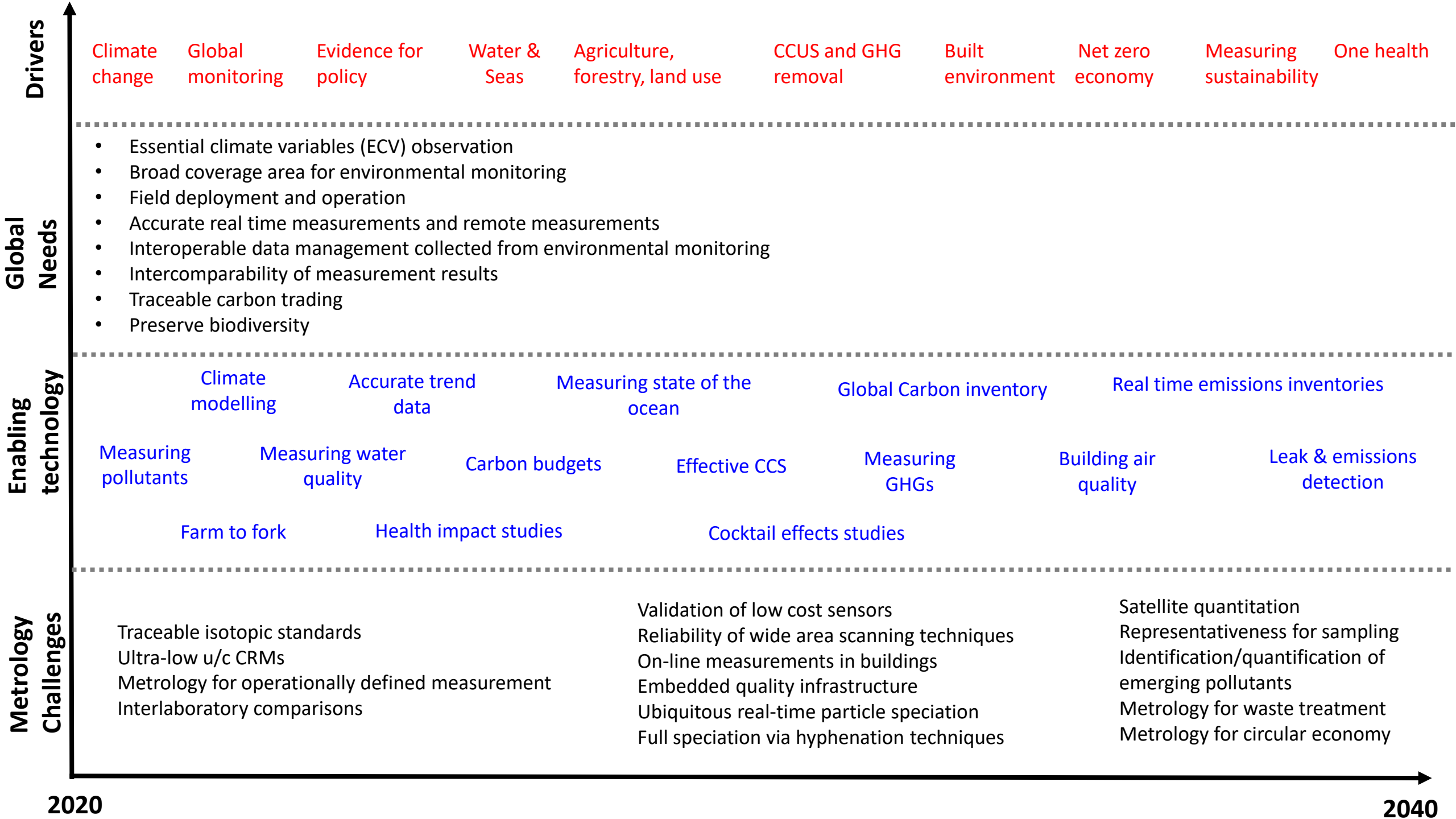
Drivers
Climate change
Global monitoring
Evidence for policy
Water & Seas
Agriculture, forestry, land use
CCUS and GHG removal
Built environment
Net zero economy
Measuring sustainability
One health
Global Needs
Essential climate variables (ECV) observation
Broad coverage area for environmental monitoring
Field deployment and operation
Accurate real time measurements and remote measurements
Interoperable data management collected from environmental monitoring
Intercomparability of measurement results
Traceable carbon trading
Preserve biodiversity
Enabling technology
Climate modelling
Accurate trend data
Measuring state of the ocean
Global Carbon inventory
Real time emissions inventories
Measuring pollutants
Measuring water quality
Carbon budgets
Effective CCS
Measuring GHGs
Building air quality
Leak & emissions detection
Farm to fork
Health impact studies
Cocktail effects studies
Metrology Challenges
Traceable isotopic standards
Ultra-low u/c CRMs
Metrology for operationally defined measurement
Interlaboratory comparisons
Validation of low cost sensors
Reliability of wide area scanning techniques
On-line measurements in buildings
Embedded quality infrastructure
Ubiquitous real-time particle speciation
Full speciation via hyphenation techniques
Satellite quantitation
Representativeness for sampling
Identification/quantification of emerging pollutants
Metrology for waste treatment
Metrology for circular economy
2020
2040