
Supplementary information

Short- and long-term warming effects of methane may affect the cost-effectiveness of mitigation policies and benefits of low-meat diets

In the format provided by the authors and unedited

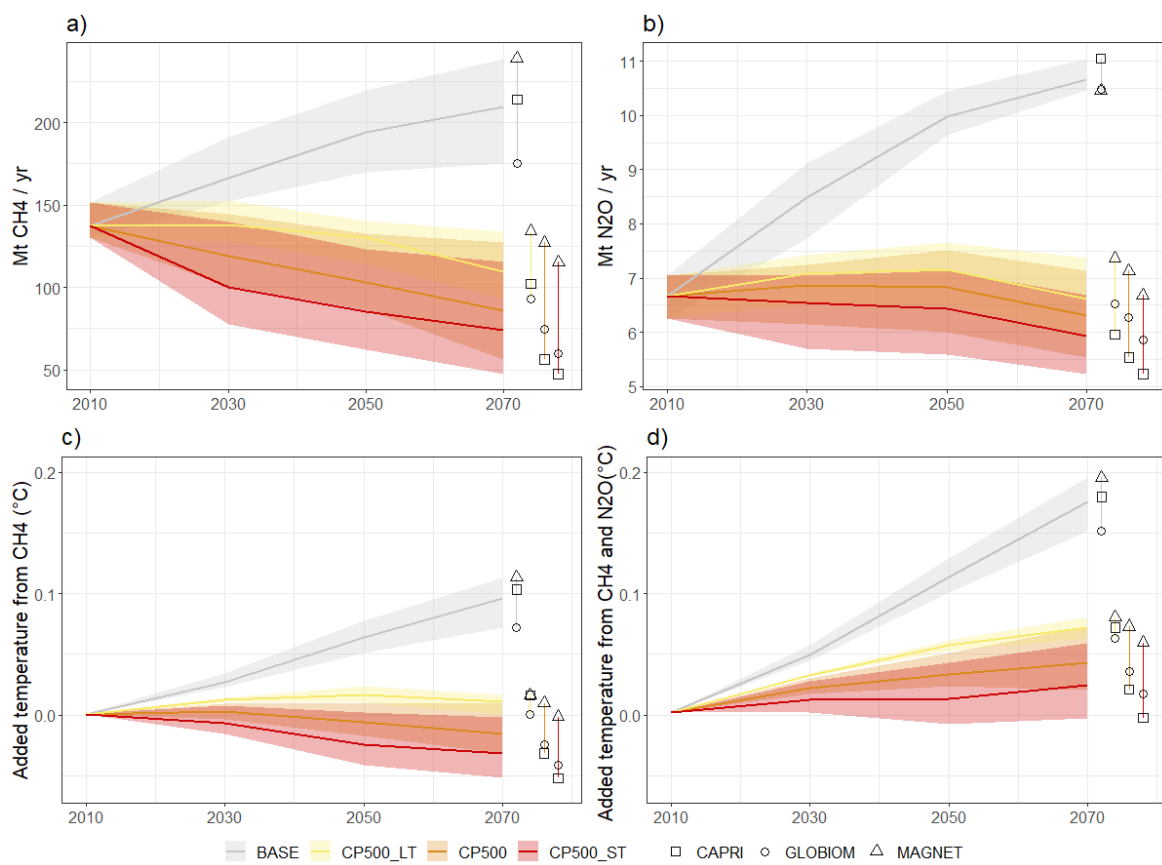
1 Short- and long-term warming effects of methane may affect the
 2 cost effectiveness of mitigation policies and benefits of low meat
 3 diets

4 **Supplementary Information**

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6 **Additional supporting Figures**

7 *Figure S1: Methane and nitrous oxide emissions for the baseline and 500 \$/t carbon price scenarios. World totals by*
 8 *year and model; (a) annual Mt CH₄; (b) annual Mt N₂O; (c) added warming for CH₄ emissions (°C); and (d) added warming*
 9 *for total non-CO₂ emissions (°C).*

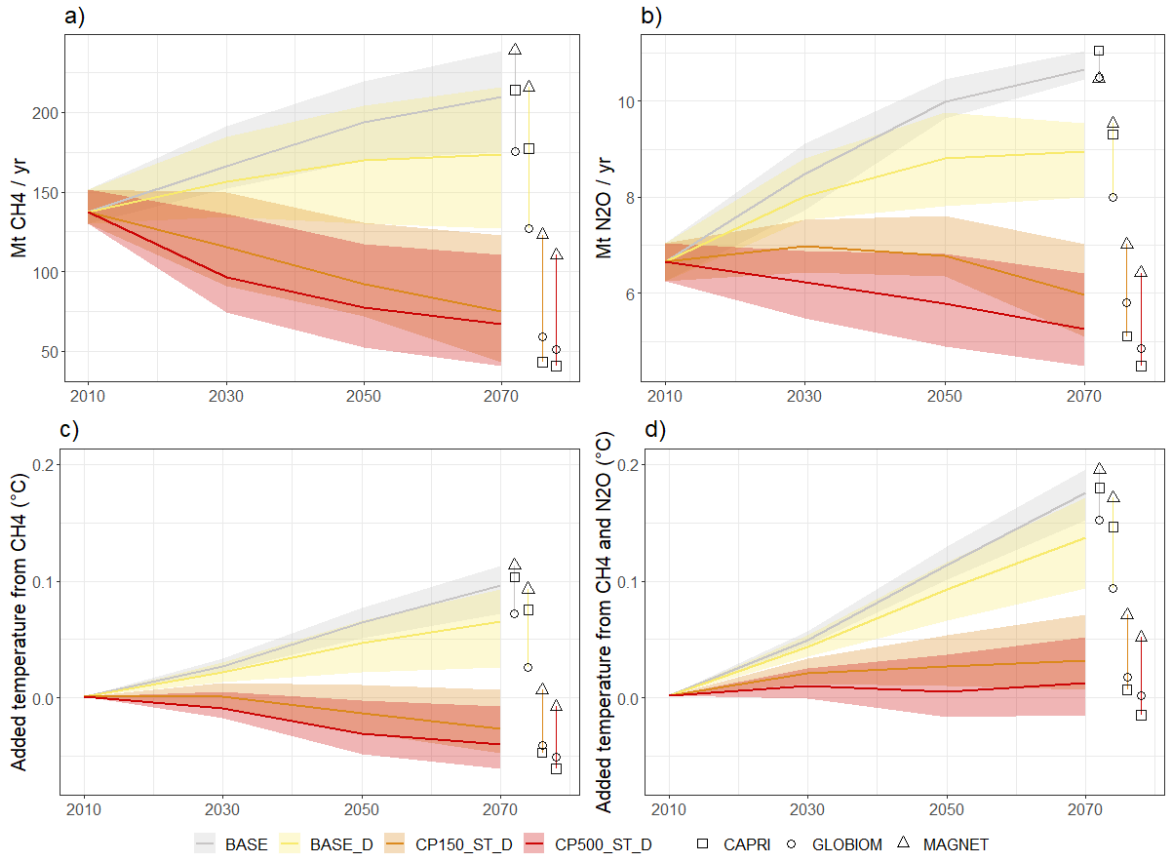


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11 Note: The shading is the range (distribution across models for respective scenario) compared to the average (thick
 12 middle line)

13

14 **Figure S2: Methane and nitrous oxide emissions for the baseline and short-term carbon price scenarios including dietary**
 15 **shifts. World totals by year and model; (a) Annual Mt CH₄; (b) Annual Mt N₂O; (c) added warming for CH₄ emissions (°C);**
 16 **and (d) added warming for total non-CO₂ emissions (°C).**

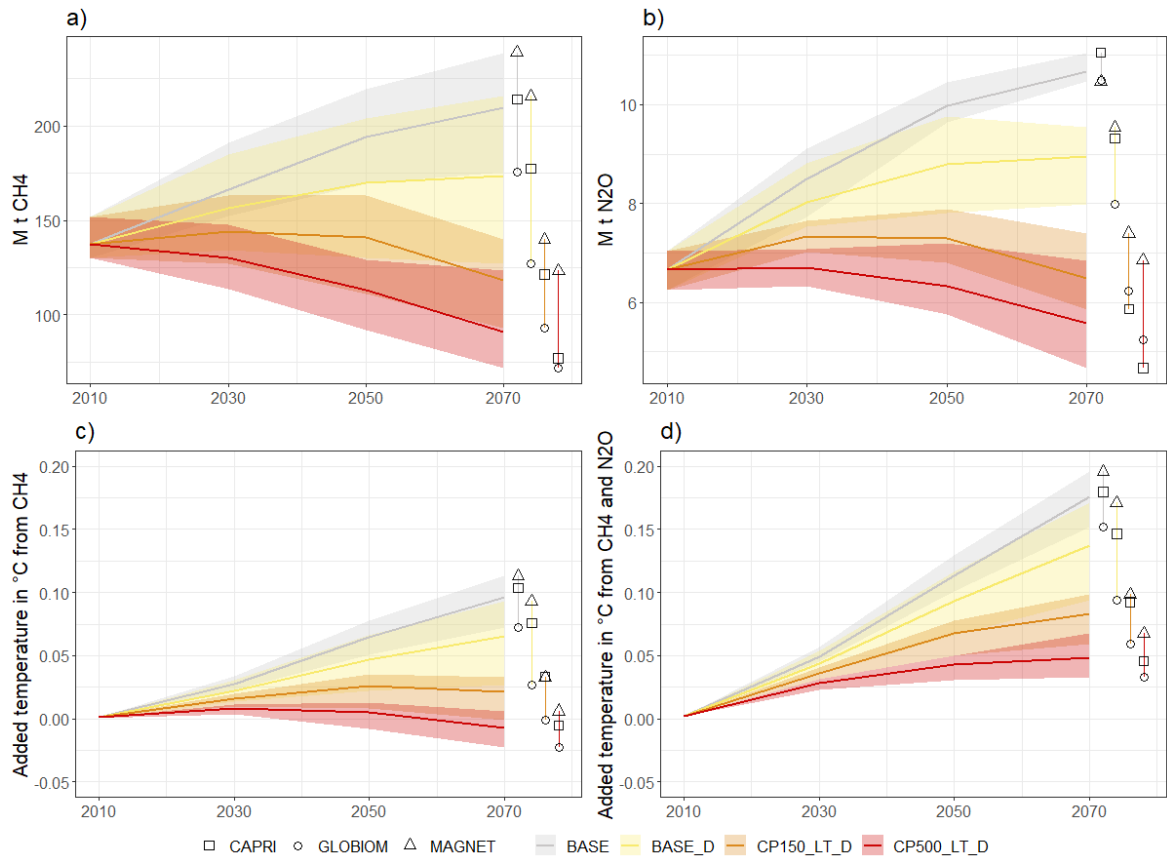


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18 Note: The shading is the range (distribution across models for respective scenario) compared to the average (thick
 19 middle line)

20

21 **Figure S3: Methane and nitrous oxide emissions for the baseline and long-term carbon price scenarios including dietary**
 22 **shifts. World totals by year and model; (a) Annual Mt CH₄; (b) Annual Mt N₂O; (c) added warming for CH₄ emissions (°C);**
 23 **and (d) added warming for total non-CO₂ emissions (°C).**



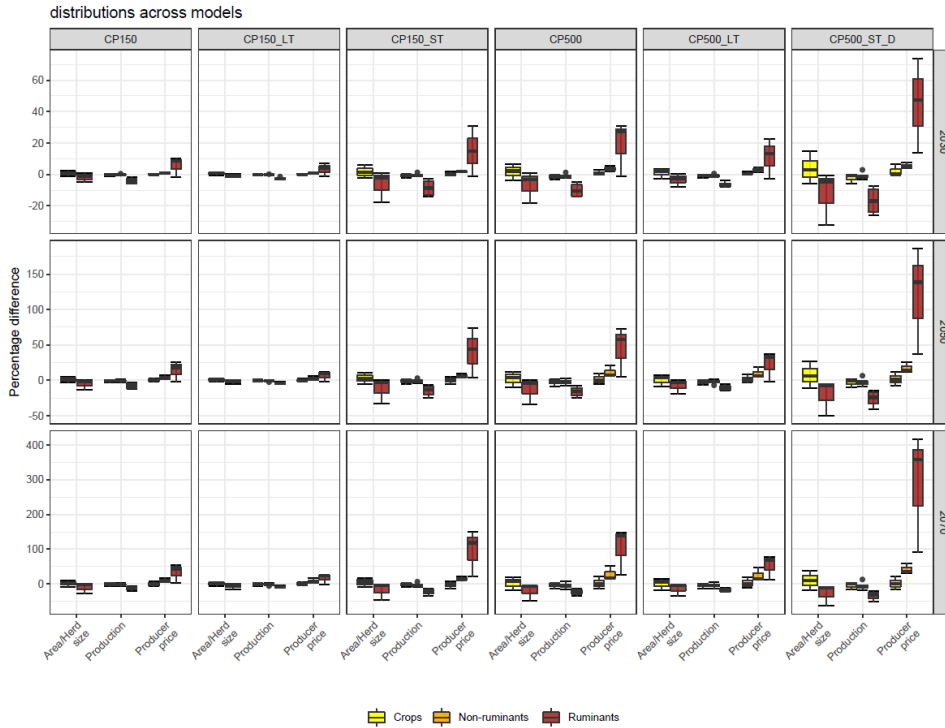
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25 Note: The shading is the range (distribution across models for respective scenario) compared to the average (thick
 26 middle line)

27

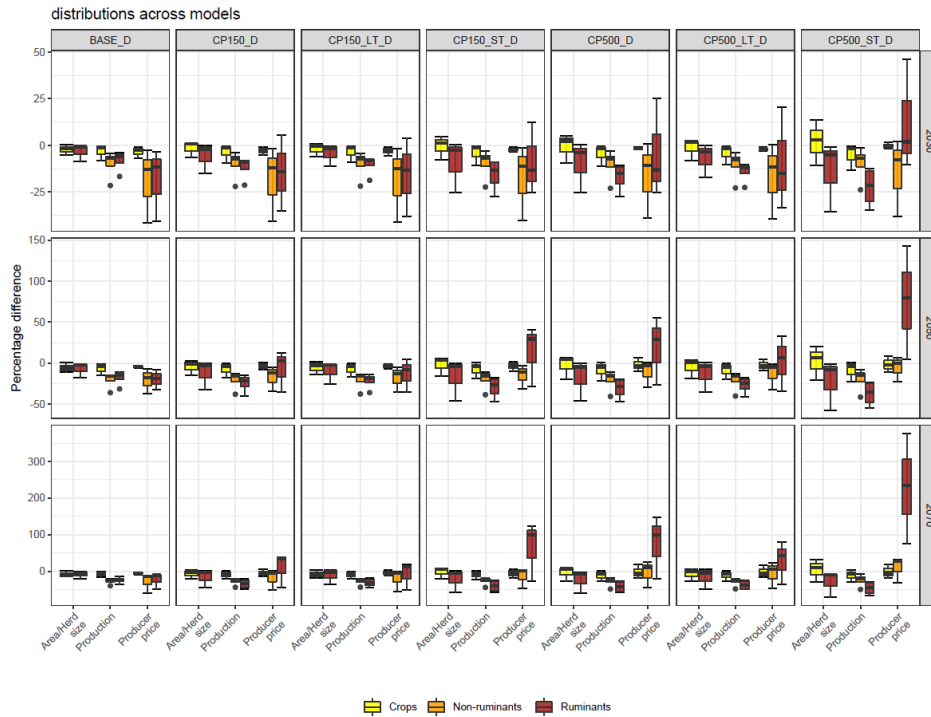
28 **Figure S4: Area, herd sizes, production and producer prices for crops, non-ruminants and ruminants aggregate products.**
 29 *World totals for all scenarios, average model estimates, percentage change relative to the baseline: (a) non-dietary shift*
 30 *scenarios and (b) dietary shift scenarios*

31 (a)



32

33 (b)



34

35 **Note:** non-ruminant herd sizes are not reported due to lack of detailed information by the models involved, which are
 36 relying on slaughtering statistics.