



# THE 2019 **EU AGRICULTURAL OUTLOOK** CONFERENCE

**Sustainability**  
from Farm  
to Fork



**Brussels, 10-11 December 2019**

Agriculture  
and Rural  
Development



## Janusz Wojciechowski

- První veřejné vystoupení
- Zachovat výši rozpočtu
- Zvýšení ekologické produkce (potraviny)
- Zmenšit přepravu zvířat, přiblížit zpracování
- Zabránit koncentraci půdy, získávání monopolního postavení, zneužívání dotací







## Stella Kyriakides

- Strategie bezpečných a kvalitních potravin
- Plýtvání potravinami (20% se vyhazuje!)
- Správný životní styl – velký podíl populace s nadváhou
- Hlavní pozornost na omezení hnojiv, pesticidů a antibiotik
- Musíme zanechat Evropu v pořádku „dlužíme to budoucím generacím“



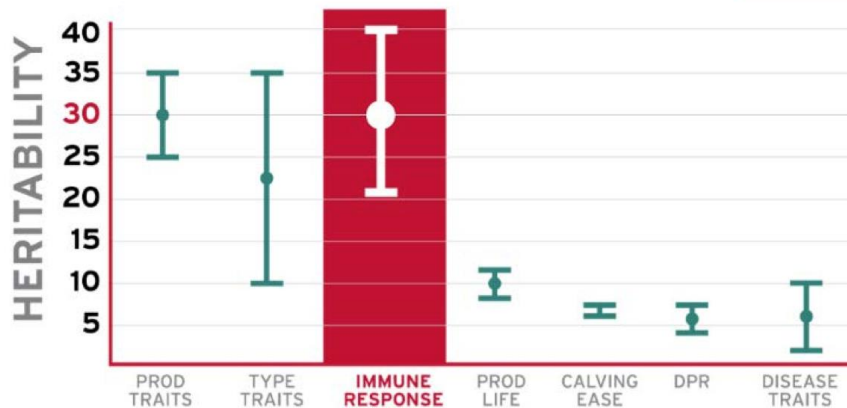
# CÍL: UDRŽITELNÉ ZEMĚDĚLSTVÍ

- Situace je alarmující: degradace půdy, ztráta biodiversity, oteplování klimatu, znečišťování prostředí, chybí voda (nejen pitná), část populace se přejídá, část nemá co jíst.
- Nutnost pracovat bez pesticidů, omezit hnojiva. Opatření ke snížení skleníkových emisí.
- Bude velmi nákladné: 10 mld Euro jen pro vědu
- rozpor mezi udržitelností a produktivitou
- Restrukturalizace, inovace, nové přístupy, biodiversita, nové technologie
- 





**30%**  
IS HIGH FOR  
HERITABILITY



**Immune Response Heritability  
is High at 30%**





## PROVEN ON FARM GLOBALY

Reported from 35 commercial herds totaling 30,000 cows  
75.000 heifers

| HEALTH EVENT          | IMMUNITY+<br>Prevalence | Non-Immunity+<br>Prevalence |  Reduction |
|-----------------------|-------------------------|-----------------------------|-----------------------------------------------------------------------------------------------|
| Mastitis              | 28.5%                   | 31.7%                       | 10.0%                                                                                         |
| Persistent Mastitis   | 4.4%                    | 5.3%                        | 17.0%                                                                                         |
| Lameness              | 21.1%                   | 24.0%                       | 12.1%                                                                                         |
| Miscellaneous Illness | 5.9%                    | 6.5%                        | 9.2%                                                                                          |
| Mortality             | 4.8%                    | 6.0%                        | 20.0%                                                                                         |
| Heifer Pneumonia      | 9.6%                    | 9.8%                        | 2.1%                                                                                          |
| Heifer Diarrhea       | 5.4%                    | 5.7%                        | 5.3%                                                                                          |
| Heifer Mortality      | 7.7%                    | 9.2%                        | 16.3%                                                                                         |

Larmer et al., 2017 – Cattle Practice





## 2500 Cow Dairy in Slovakia - this farm used Immunity bulls-

### The Results

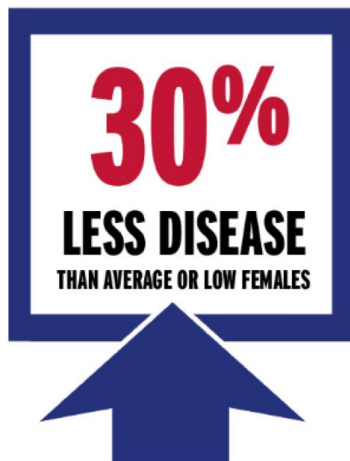
# Immunity+ sired cows: 326

# Non-Immunity+ or Unknown Immunity sired cows: 662

| 1 <sup>st</sup> Lactation Cows | Sold & Died | Mastitis   | Metritis   | Ketosis   | Abort     | DNB        | RP         | PNEU       |
|--------------------------------|-------------|------------|------------|-----------|-----------|------------|------------|------------|
| Immunity+ Impact               | 18.8%<br>↓  | 31.5%<br>↓ | 43.1%<br>↓ | 6.2%<br>↓ | 5.7%<br>↓ | 41.3%<br>↓ | 47.9%<br>↓ | 73.2%<br>↓ |



## 10.000 cow study US and Germany



| DISEASE                        |                 | ABORTION | MISC. DISEASE | KETOSIS | LAMENESS | MASTITIS | METRITIS | PNEUMONIA |
|--------------------------------|-----------------|----------|---------------|---------|----------|----------|----------|-----------|
| RELATIVE REDUCTION COMPARED TO | LOW AND AVERAGE | -5.8%    | -28.5%        | -12.0%  | -39.2%   | -21.5%   | -16.6%   | -73.2%    |

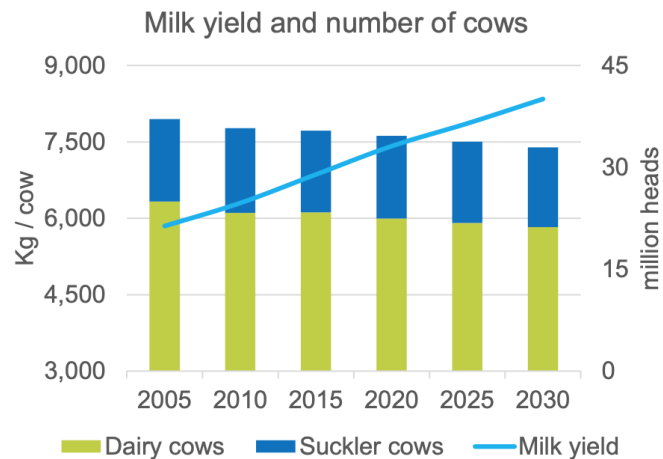
These High Immune response cows have 30% less disease than their herdmates with either average or low immune response herdmates.

**savings 124\$ per cow/year**





# EFFICIENCY GAINS CAN HELP



-0.5 million  
suckler cows

-1.4 million  
dairy cows

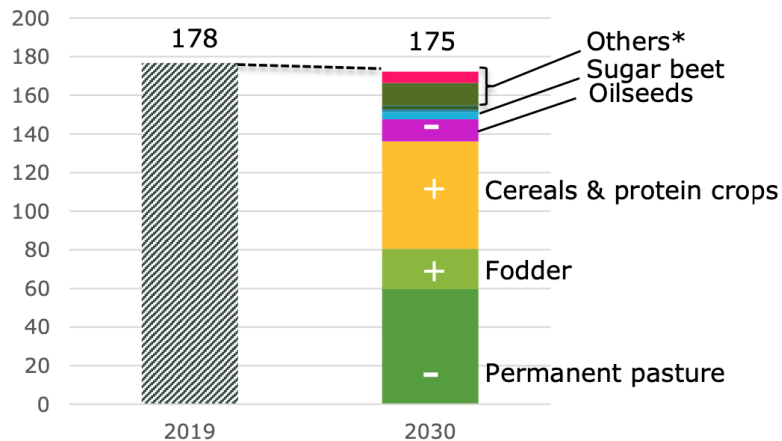


lower GHG



# EU AGRICULTURAL LAND KEEPS ON REDUCING...

EU agricultural land (million ha)



\*Others: Roots & Tubers, Fruits & Vegetables, Rice, Fallow

## Main drivers



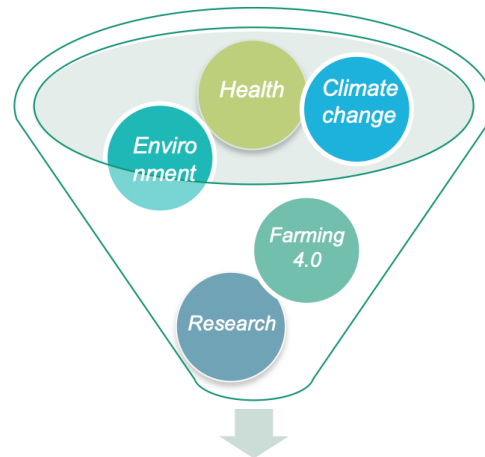
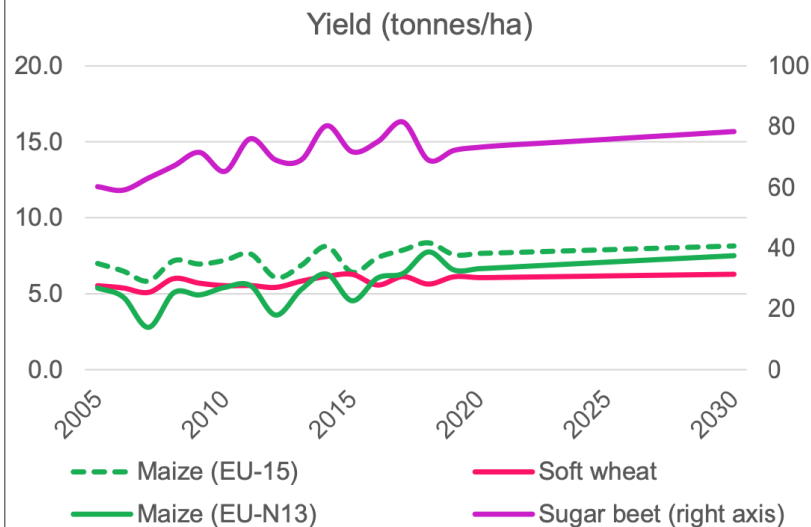
Afforestation  
Urbanisation



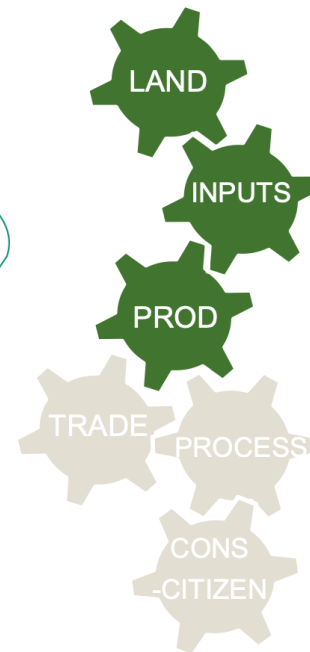
Land consolidation  
Specialisation  
Rotation systems  
Feed demand



# ...WITH A MODERATE YIELD GROWTH

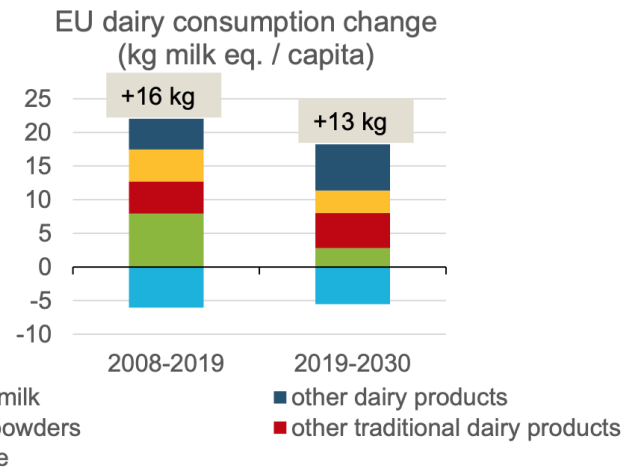
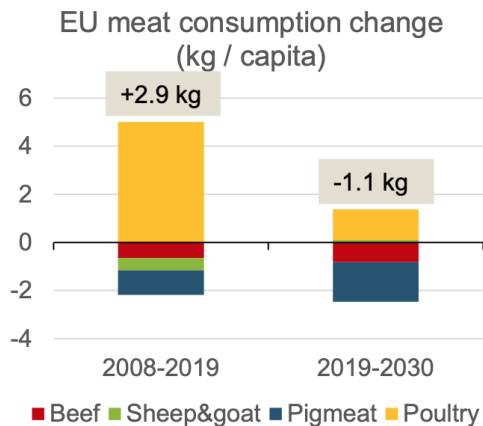


Moderate yield increase





# LESS MEAT AND MORE DAIRY CONSUMED IN THE EU





## Milk Aisle in 2014



Source Image: New York Times Website

## Milk Aisle Today



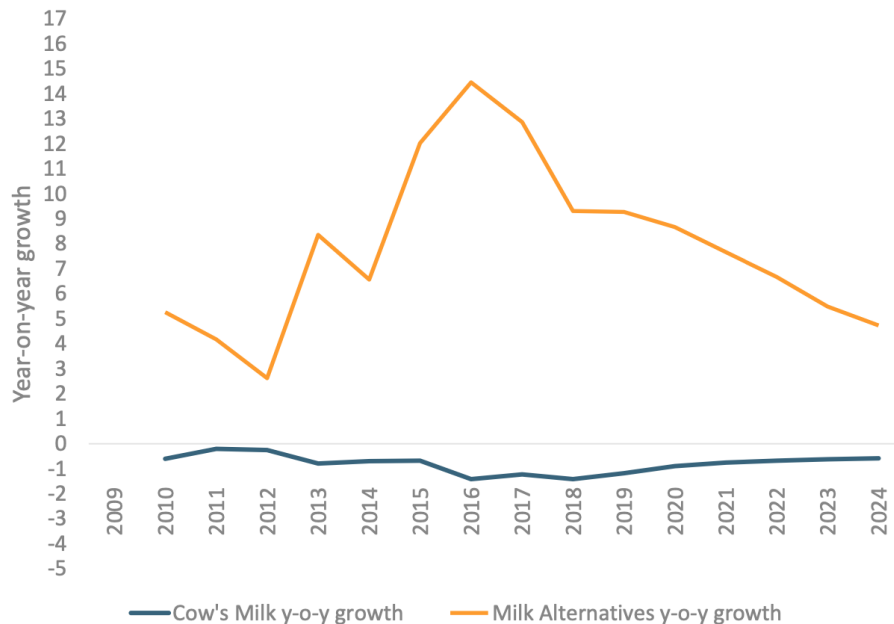
Source Image: Adam Smith Website





## Cow's Milk vs. Milk Alternatives: EU Total Volume and Growth 2009-2024

Million Litres



# 29 billion

Litres of cow's milk sold in the EU in 2019

# -1 billion

Litres of cows milk expected to be sold between 2019-2024

# +488 million

Litres of milk alternatives expected to be sold between 2019-2024

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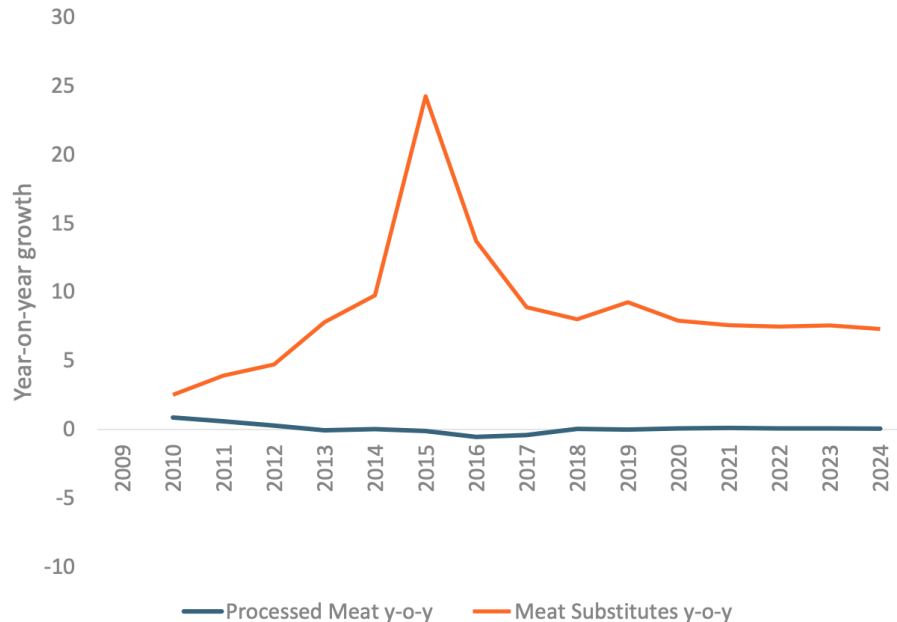
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## Processed Meat vs. Meat Substitutes: EU Total Volume and Growth 2009-2024 000's Tonnes



# 7.3 million

Tonnes of processed meat sold  
in the EU in 2019

# +28,100

Tonnes of processed meat  
forecast to be sold between  
2019-2024, EU

# +62,900

Tonnes of meat alternatives  
forecast to be sold between  
2019-2024, EU

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## Avoiding meat and dairy is 'single biggest way' to reduce your impact on Earth

Biggest analysis to date reveals huge footprint of livestock - it provides just 18% of calories but takes up 83% of farmland



Source image: Guardian website



Source image: Live Kindly website



Source image: Mirror website

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# 318%

Increase in front-of-pack grass-fed/pasture-raised claims on dairy products in Western Europe 2015-19



Source image: Irish Central Website



Source image: Carrefour Website

# €238m

Absolute value growth of organic chilled processed meat and seafood in Western Europe 2015-19

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## Beef burger

**Waitrose 2 rump steak burgers**

**INGREDIENTS:** British beef (94%), tapioca starch, sea salt, black pepper, preservative sodium sulphite, antioxidant sodium ascorbate

**ALLERGY ADVICE:** For allergens see ingredients in bold.

**Preparation:** Remove all packaging. Wash hands all surfaces and utensils after touching raw meat.

| GRILL       | CHILLED    |
|-------------|------------|
| MEDIUM HEAT | 14-18 mins |

Preheat grill. Remove all packaging. Place on grill rack under a medium heat, turning occasionally until thoroughly cooked, the juices run clear and there is no pink meat.

| PAN FRY     | CHILLED    |
|-------------|------------|
| MEDIUM HEAT | 14-18 mins |

Heat 1 tsp of oil in a frying pan. Place burgers into the pan, turning occasionally until thoroughly cooked the juices run clear and there is no pink meat.

**7 ingredients**

| TYPICAL AS PREPARED | 100g  | BURGER |
|---------------------|-------|--------|
| Energy kJ           | 927   | 1019   |
| Energy kcal         | 222   | 244    |
| Fat                 | 11.5g | 12.7g  |
| of which saturates  | 4.7g  | 5.2g   |
| Carbohydrate        | 4.1g  | 4.5g   |
| of which sugars     | <0.5g | <0.5g  |
| Fibre               | 0.6g  | 0.7g   |
| Protein             | 25.1g | 27.6g  |
| Salt                | 0.60g | 0.66g  |

waitrose.com/nutrition

This pack contains 2 servings.

RI = % of your daily reference intake.

**300ge**

Produced in the UK from British beef for Waitrose Limited

UK 2045 EC

## Plant-based burger

**BEYOND BURGER - THE FUTURE**  
IT'S A NEW BREED OF BURGER. MADE FROM PLANTS.  
JOIN IN #BEYONDBURGER #BEYONDMEAT

**VEGANE BURGER AUF ERBSENPROTEINBASIS, AUFGETAUT / GAULETTES VÉGÉTALES À BASE D'ÉPROTEINES DE PETITS POIS, DÉCONGELÉES**

**INGREDIENTS:** - eau, isolat de protéine de pois (94%), huile de colza, huile de noix de coco raffinée, arôme, arôme de fumée, stabilisants: cellulose, méthylcellulose, gomme arabique, féculle de pomme de terre, maltodextrine, extrait de levure, féculle de pomme de terre, maltodextrine, extrait de levure, sel, huile de tournesol, levure séchée, antioxydants: acide ascorbique, acide acétique; colorant: rouge de betterave; amidon modifié, extrait de pomme; jus de citron concentré.

**Durchschnittliche Nährwerte / Valeurs nutritives moyennes**

|                                                             | pro 100 g          | pour 100 g |
|-------------------------------------------------------------|--------------------|------------|
| Brennwert / Énergie                                         | 1120 kJ / 265 kcal | 19 g       |
| Fett / Matières grasses                                     | 4,6 g              | 5,3 g      |
| - davon gesättigte Fett Säuren / - dont acides gras saturés | 0 g                | 0 g        |
| Kohlenhydrate / Glucides                                    | 18 g               | 1,1 g      |
| - davon Zucker / - dont sucres                              |                    |            |
| Eiweiß / Protéines                                          |                    |            |
| Salz / Sel                                                  |                    |            |

**300ge**

Produced in the UK from British beef for Waitrose Limited

**20+ ingredients**

**ZUBEREITUNGSEMPFEHLUNG / CONSEILS DE PRÉPARATION**

- KÖHL AUFBEWAHREN UND INNERHALB VON 3 TAGEN NACH DEM ÖFFNEN VERBRAUCHEN. NICHT WIEDER EINFRIESEN.
- VOR DEM SERVIEREN WOLLSTÄNDIG GAREN.
- DEN GRILL ÜBER DIE SPANNE AUF MITTLERE BIS HOHE HITZE VORHEIZEN UND DEN BEYOND BURGER\* VON JEDER SEITE CA. 3 MINUTEN GRILL EN ODER BRATEN.
- NICHT ZU STARK GAREN, DAS INNERE DES PATTIES BLEIBT AUCH NACH DEM GAREN ROSA.
- VOLLSTÄNDIG GEGART, WENN DIE KERNTemperatur 74°C ERREICHT HAT.

**FÜLLGEWICHT: 227ge (2 x 113,5 g)**

Bei max. +7°C zu verbrauchen (bis siehe Aufdruck) / Conservé à max. +7°C, peut être consommé jusqu'à: voir emballage

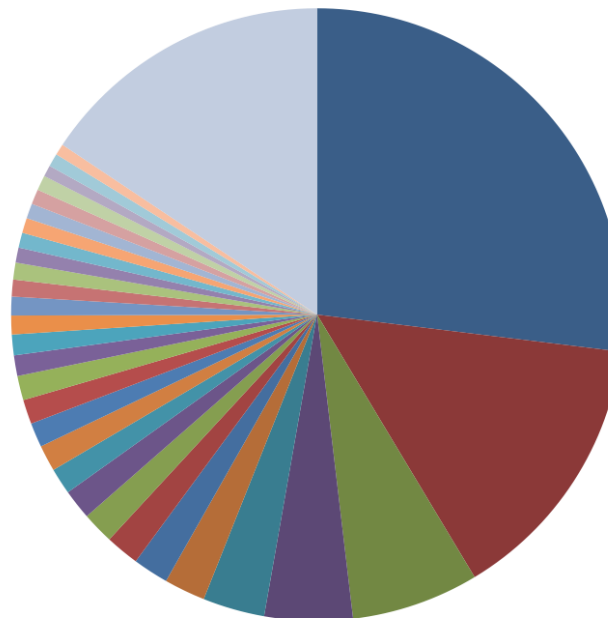
Kärllein Feinkost GmbH & Co. KG · Brägelster Straße 110 · D-45539 Lobbe





| <b>ZEMĚ:</b>            | <b>V %</b> |
|-------------------------|------------|
| Čína                    | 27,2       |
| USA                     | 14,6       |
| Indie                   | 6,8        |
| Rusko                   | 4,7        |
| Japonsko                | 3,3        |
| Německo                 | 2,2        |
| Irán                    | 1,9        |
| Saúdská Arábie          | 1,8        |
| Jižní Korea             | 1,7        |
| Kanada                  | 1,6        |
| Indonésie               | 1,4        |
| Mexiko                  | 1,4        |
| Brazílie                | 1,3        |
| Turecko                 | 1,3        |
| Jižní Afrika            | 1,3        |
| Austrálie               | 1,1        |
| Velká Británie          | 1,1        |
| Itálie                  | 1,0        |
| Francie                 | 1,0        |
| Polsko                  | 0,9        |
| Thajsko                 | 0,9        |
| Argentina               | 0,8        |
| Thajwan                 | 0,8        |
| Španělsko               | 0,8        |
| Egypt                   | 0,8        |
| Ukrajina                | 0,8        |
| Kazachstán              | 0,8        |
| Spojené Arabské Emiráty | 0,6        |
| Malajsie                | 0,7        |
| Vietnam                 | 0,6        |
| Zbytek světa            | 15,8       |

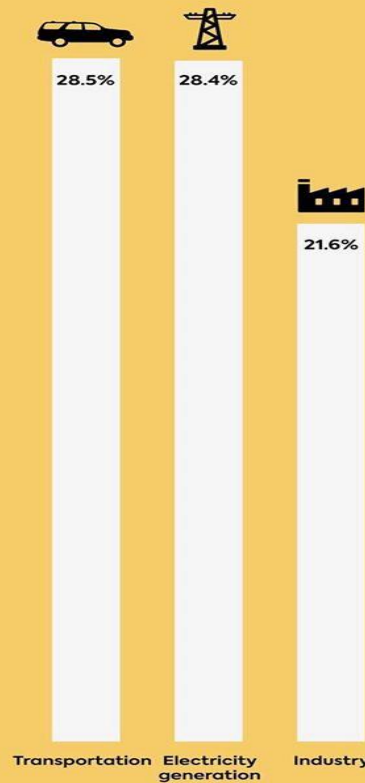
**Světové emise uhlíku rok 2017**



- Čína
- USA
- Indie
- Rusko
- Japonsko
- Německo
- Irán
- Saúdská Arábie
- Jižní Korea
- Kanada
- Indonésie
- Mexiko
- Brazílie
- Turecko
- Jižní Afrika
- Austrálie







# METHANE CLAIMS AGAINST CATTLE ARE OVERBLOWN

According to the EPA, all livestock only represents 3.9% of the US GHG emissions, which is far lower than the 18% – 51% range many plant-based advocates report. The largest source of GHG emissions in the US comes from energy and transportation.

2016 US Total GHG Emissions (Source: US EPA)



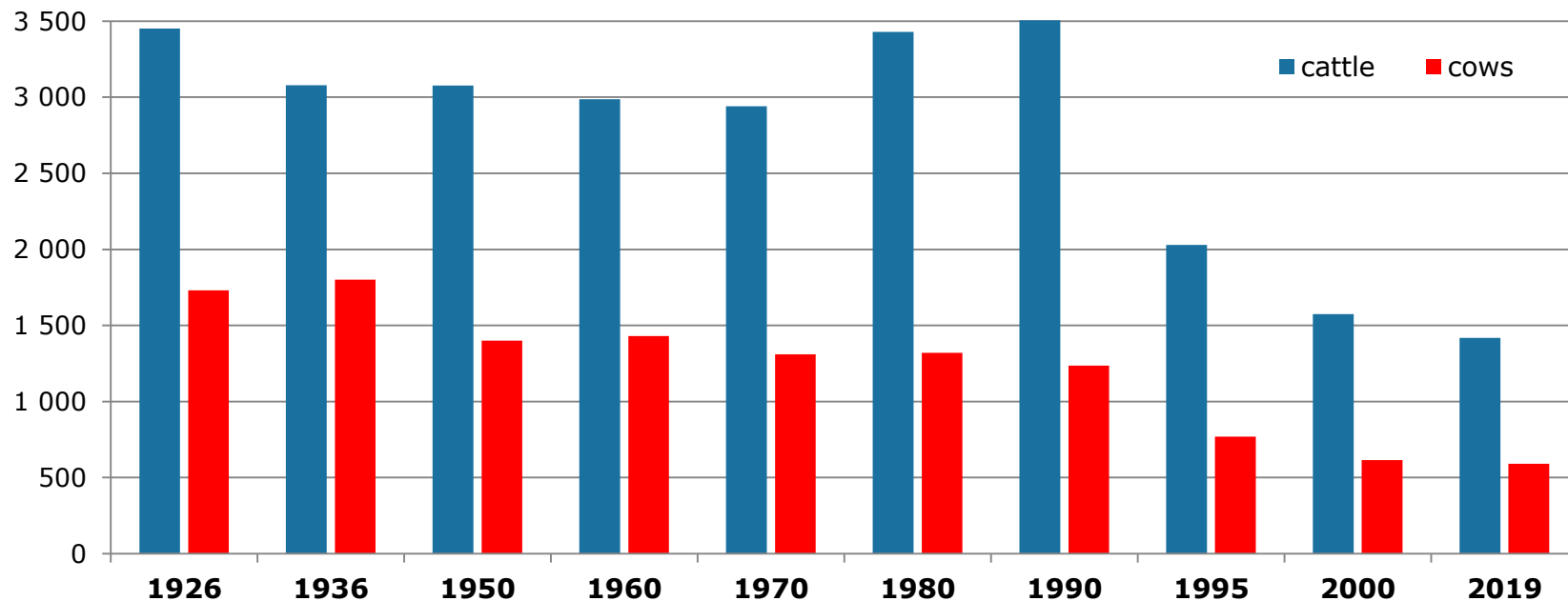
Within the livestock category, beef represents 2% of total US GHG emissions.<sup>1</sup>

1. <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#agriculture>

[www.sacredcow.info](http://www.sacredcow.info)

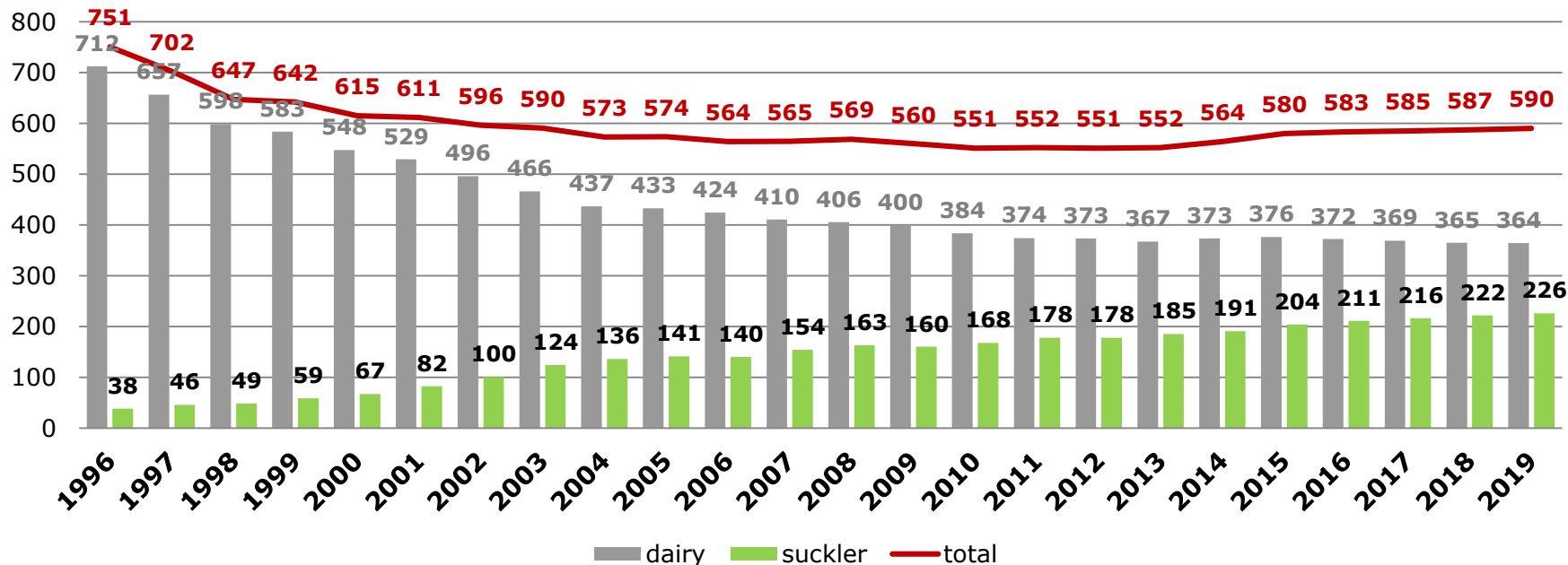


# DEVELOPMENT OF CATTLE IN THE CZECH REPUBLIC (IN THOUSANDS HEADS)



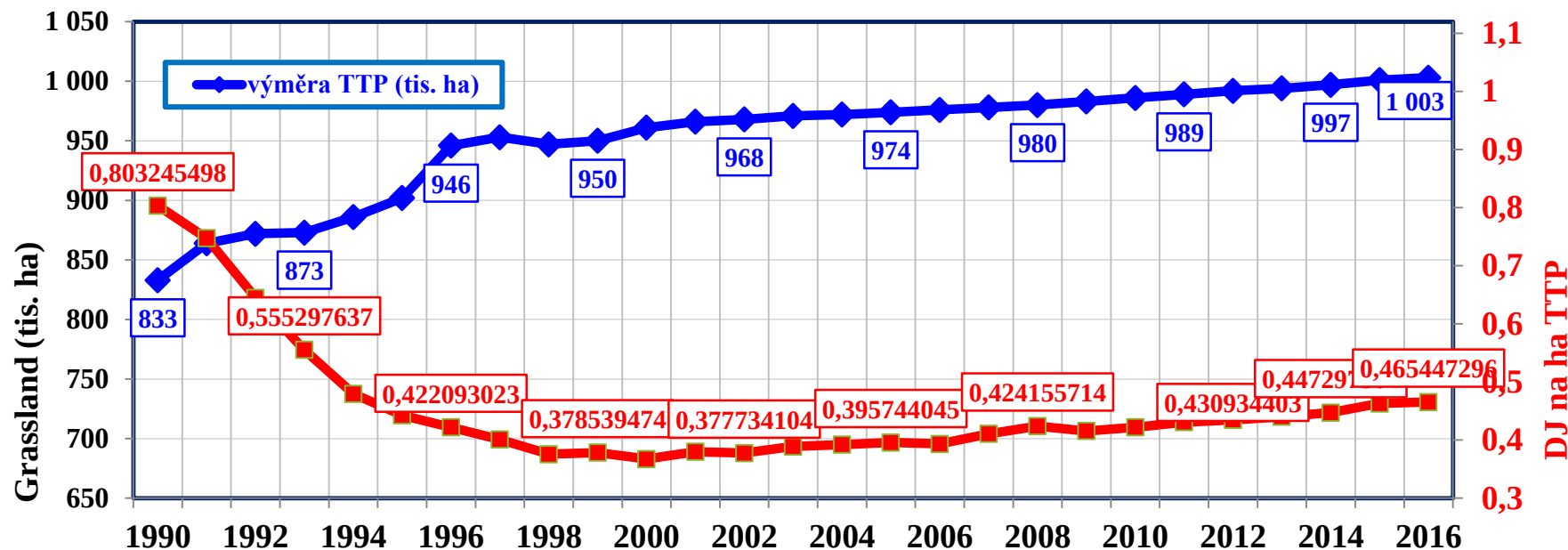
# NUMBERS OF COWS IN THE CZECH R.

## (TOTAL, DAIRY, SUCKLER)

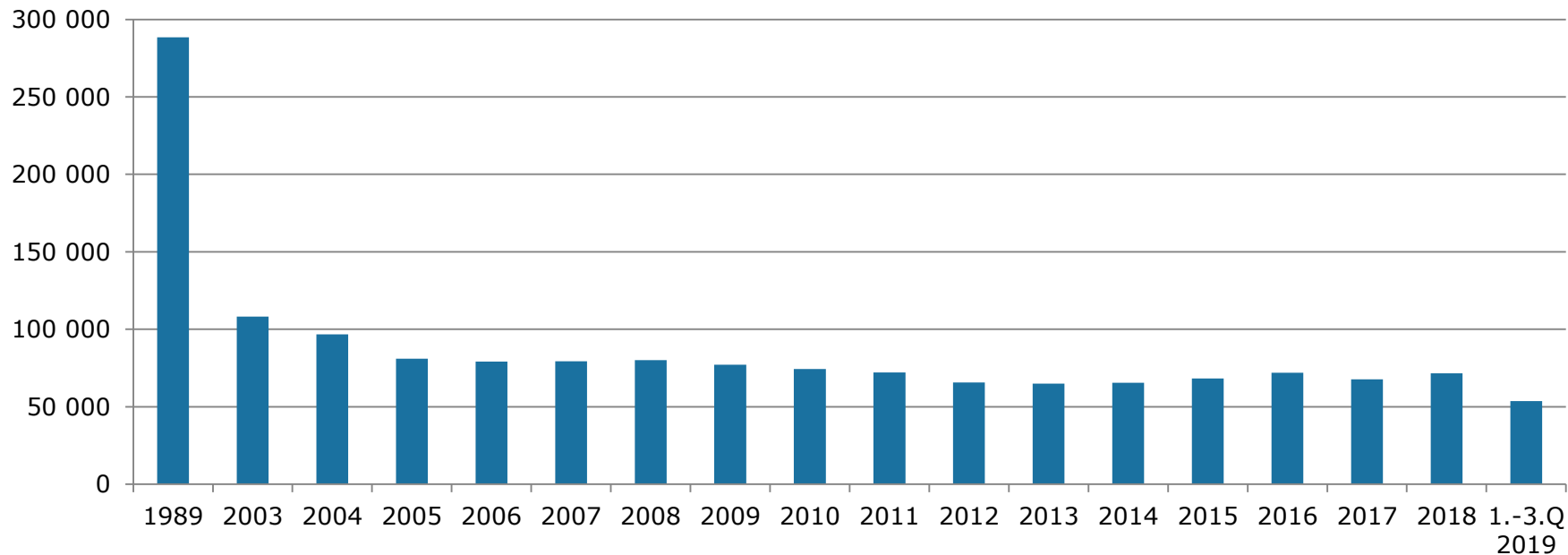




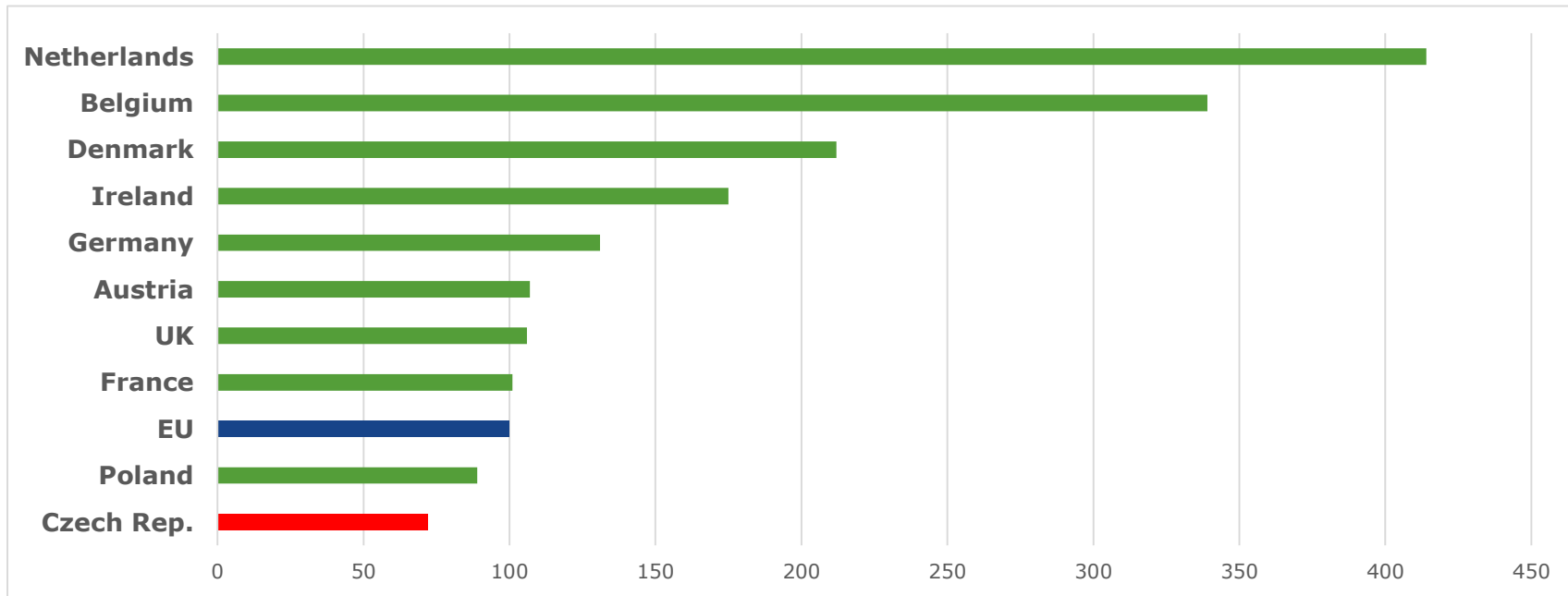
# PERMANENT GRASSLAND AREA (TTP) AND NUMBERS OF RUMINANTS BREED IN THE CZECH REPUBLIC



# DEVELOPMENT OF PRODUCTION OF BEEF AND VEAL MEAT IN THE CZECH REPUBLIC

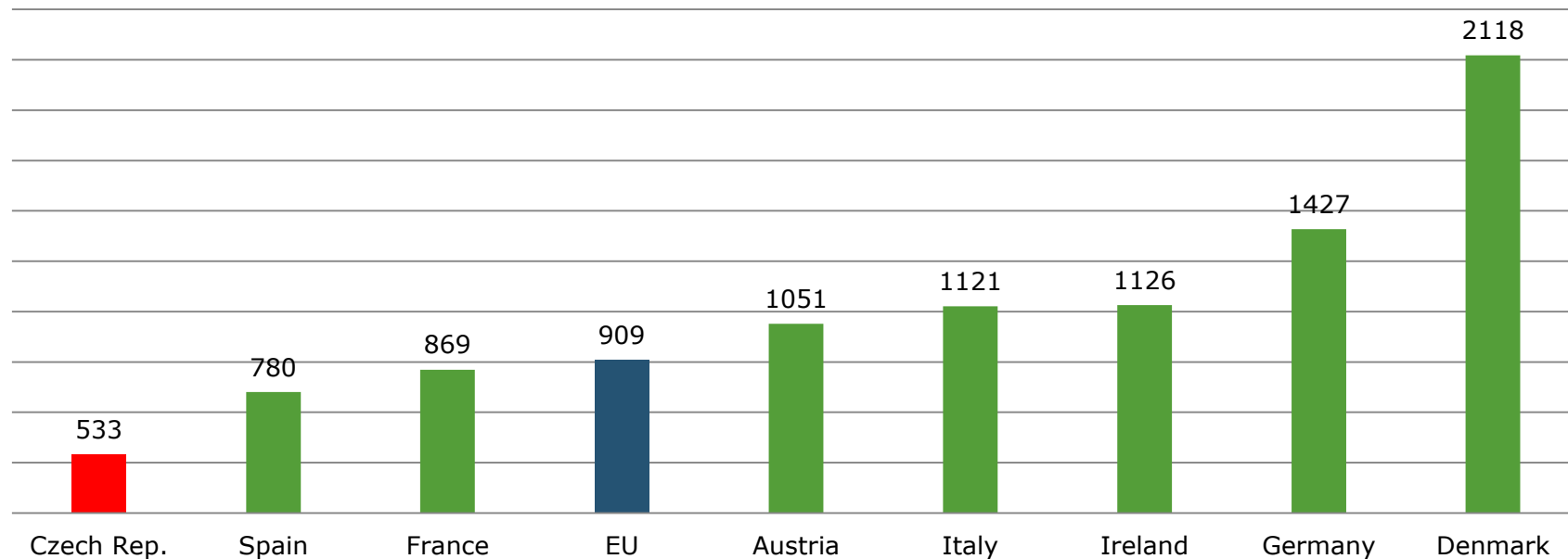


# COMPARISON OF EU LIVESTOCK DENSITY PER HECTARE OF ARABLE LAND (EU LEVEL = 100%)





# LIVESTOCK PRODUCTION IN EUR / HA OF AGRICULTURAL LAND IN 2018



# HLAVNÍ VÝSTUPY:

- Nepodceňovat, velká podpora evropských obyvatel
- Je to především politická otázka – prosazování od EK
- Dobře připravit argumentaci:
  - - kdo jsou největší znečišťovatelé? (zemědělství NE!)
  - - kde toto znečišťování probíhá? (Čína, USA, Indie) – nejsou signatáři smluv o snížení
- Inventura uhlíkové stopy na našich farmách
- Otázka pro každého z nás: skutečně hospodařím šetrně a udržitelně?





# DĚKUJI ZA POZORNOST

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