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## BALANCED PORTFOLIO

POSITIONED FOR GROWTH AND SUSTAINABILITY

Pratt & Whitney Canada

Commercial Engines

Military Engines





## POSITIONED FOR GROWTH

65,000+ engines in service: Regional Turboprop, Helicopter, General Aviation, Business Aviation

Strong position in narrowbody segment. GTF is architecture of the future

8 major programs serving military: F-35, F-22, F-16, F-15, C-17, KC-46, B-52, B-21

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# POWERING SUSTAINABLE AVIATION

## THE PRATT & WHITNEY APPROACH

### Smarter Technology

- Leverage GTF technology
- Hybrid-electric propulsion



### Cleaner Fuel

- Sustainable Aviation Fuel +
- Hydrogen propulsion



### Greener Business

- Continual reduction in environmental footprint



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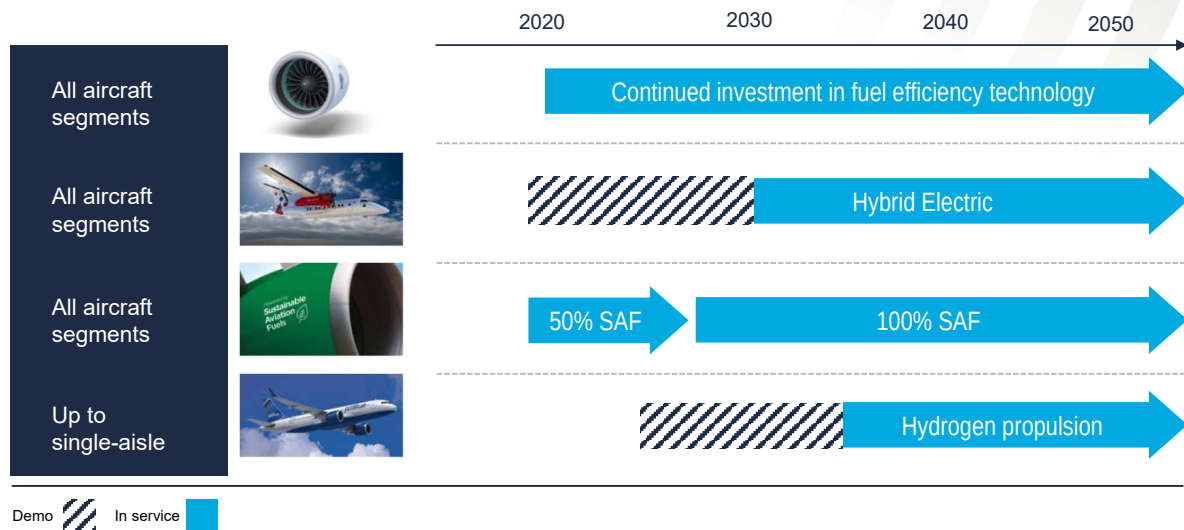
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## PATH TO SUSTAINABLE PROPULSION

DECARBONIZATION OF AVIATION LIKELY THROUGH MULTIPLE PATHWAYS



Demo In service

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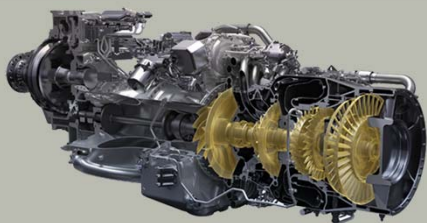
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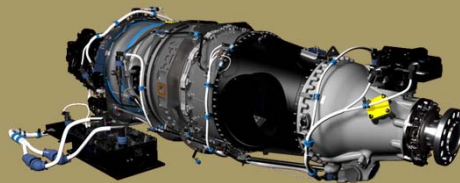
## TECHNOLOGY FOR CUSTOMER VALUE AND ENVIRONMENT

SETTING NEW STANDARDS



**PW127XT**

**40%** extended time on-wing  
& ↓ CO<sub>2</sub>



**PT6**  
E-SERIES

Connected &  
2X time on-wing



**PW800**

Double-digit improvement  
in efficiency & footprint

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## GTF ADVANTAGE ENGINE

MORE CAPABILITY FOR THE A320NEO FAMILY

up to  
**34K** takeoff thrust  
at sea level  
most powerful engine

up to  
**17%** less fuel and CO<sub>2</sub>  
vs. previous generation engines like V2500  
most efficient engine, 100% SAF compatible



**mature reliability**  
with high durability at entry into service



**full intermix + interchange**  
maximum customer flexibility

PRATT & WHITNEY  
**GTF**  
ADVANTAGE



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## LEADING THE WAY IN NEXT-GENERATION TECHNOLOGIES

HYBRID-ELECTRIC PROPULSION TECHNOLOGY  
AND FLIGHT DEMONSTRATOR PROGRAM

**30%** improvement  
in fuel efficiency and CO<sub>2</sub>

Underway in

**2021** suppliers selected



Starting in

**2022** ground tests

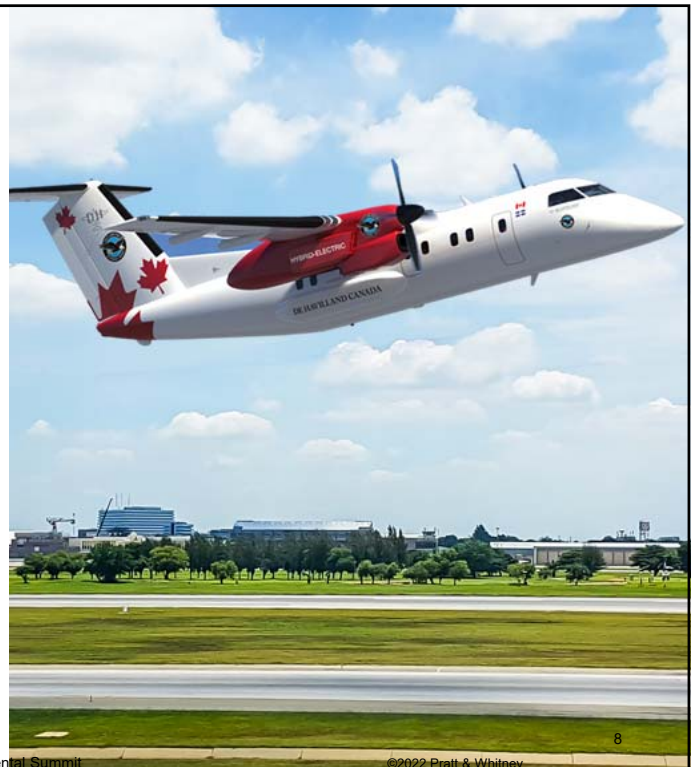


Starting in

**2024** flight tests



**SAF** compatible



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## PATH TO BETTER FUEL

### THREE COMPONENTS NEEDED FOR ADVANCED FUELS

#### 1 Engine & aircraft technology

Testing with SAFs up to 100% blend  
Adaptation for alternative fuels, H<sub>2</sub>

#### 2 Fuel production at scale

Policy measures and incentives  
Sustainable feedstocks  
Renewable energy

#### 3 Infrastructure for delivery

SAF “drop in” standard  
H<sub>2</sub> Liquefaction and handling



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## BRINGING OUR COMMUNITY TOGETHER

### THROUGH A CARBON OFFSET SERVICE



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## POWERING SUSTAINABLE AVIATION

OUR FUTURE

- Demand growth
- Fuel efficiency improvements
- Sustainable aviation fuels
- Aircraft Operational Improvements
- CO<sub>2</sub> offsetting



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**PRATT & WHITNEY**  
GO BEYOND

**THANK YOU**

**POWERING SUSTAINABLE AVIATION™**

**SMARTER. CLEANER. GREENER.**

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